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# ARCHAEOLOGIA:

OR

# MISCELLANEOUS TRACTS

RELATING TO

# ANTIQUITY.

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PUBLISHED BY THE

## SOCIETY OF ANTIQUARIES OF LONDON,

VOLUME LIII.

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M.DCCC.XCIII.

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* Presented by Alfred Higgins Esq., F.S.A.

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## ERRATUM.

Page 74, line 27, *for* "CASVLR" *read* "CASVLE."

XV.—*Calais and the Pale.* *By the* Honourable Harold Arthur Dillon, *Sec. S.A.*

Read June 18, 1891.

When Queen Mary was dying, according to Mistress Rice as quoted by Holinshed, she declared, "When I am dead and opened you shall find Calais lying in my heart."

In her letter of January 7, 1558, to the gentlemen of every shire, urging them to raise men for the succour of that town, which though she was not then aware of it had already fallen; the Queen spoke of Calais as the chief jewel of the realm. That it was so in the opinion of many there is no doubt, and the delineations of the English possessions in France of those days always present the district as viewed from this country, that is with the actual south at the top of the map. The Pale contained some 120 square miles of territory, and should have been self-supporting, but for the terrible arrears which had accumulated, and the heavy charges for the continual reparation of the sea front and works of Calais. Of the state of this possession during the English occupation the French records naturally are silent, and with the capture of the town the greater part of any English sources of information passed out of our hands. Fortunately the great survey made in 1556 gives us many details, and on that and other authorities the following state of Calais and the Pale just one and a-half years before its loss is founded. It will be seen that the Pale extended from Gravelines to near Wissant, and reached inland about six to nine miles. It was divided roughly into the high country on the west and the low country on the east, and was intersected by numerous

roads and watergangs, while large plashes of water and vast marshes covered a great extent of the land. To the English occupation, however, was due the great network of canals and banks which had reduced to arable and grazing land the greater part of the low country. The large trade passing through the port necessitated the construction and maintenance of good roads and canals, and the cessation of this trade on its capture by the French threw back the country to a considerable extent. It is not proposed to touch on the events of the loss of Calais, but merely to show what was the state of this district at the time when we allowed it to be snatched from us.[a]

[a] The survey of Calais and the Pale in 1556 is to be found in two large volumes in the Public Record Office. These are known as vols. 371, 372 of Miscellaneous books formerly in the Augmentation Office, and the first bears as its title:

Caleis. A New Survey thereof.
Ye Marches made up A° Dni. 1556^to^.

These volumes give the names of the owners, the extent and boundaries, rent, and in some cases the names of every holding in the town and Pale. Besides these particulars the parish bounds, the principal roads, waterways, &c. as determined by the "Compass Marine" are also noted; but the map to which the survey refers, and on which no doubt all the bearings were plotted, has not yet been found. The distances are given in rods of low-country measure, but the length of that unit is difficult to determine. It must be remarked that the various bearings are as a rule given to within a quarter of a point only, and, as a compass point equals $11\frac{1}{4}$ degrees, a considerable margin for error must be allowed for. In many cases also wrong bearings have been noted, as may be seen by the reciprocals. The variation of the magnetic compass has not been recorded at an earlier date than 1576, but as in this survey the bearing of Dover Castle, from the Howberg on the borders of Scales and Sandgate, is noted as north-west by west quarter west, and the actual bearing is north-west three-eighths west, we are enabled to calculate that the magnetic variation in 1556 was about $\frac{7}{8}$ points or 10° west. In one or two cases in the survey, it is noted that a half point to the south must be allowed on certain bearings, "for so the compass stoode." This may have been due to the deflection of the compass; but in any case it will be seen that great exactitude was not the rule. However, William Pettit, the surveyor, has in this survey thrown more light on the state of the Pale than anyone else, and has unfortunately not been consulted by subsequent historians or geographers as much as his work deserves.

The Edward IV. terrier often quoted in this paper is to be found in the Public Record Office under the title of Augmentation Office Book 407. It is described within as a Terrar and Rentale of the Revenues of the lands holden of the King w^t^yn his Lordshippe of Oye, also a Terrar by mesurage and rentall of the parishes of S. Omerkerk, Hereway, Hofkirk, Lordship of Marke, Guempe parish, Newkirk parish, Mark parish, S. George Church parish. It appears to have been copied at a later period from one prepared in Edward IV's. reign. It is an 8vo. book, and bound with it is the "Inventary of all the churches in the high and low country, taken the xxix^th^ of May, A° 1553." This is printed in Appendix V.

The original limits of the English territory comprised in the expression Calais and the Pale may be roughly determined by the terms of the Peace of Bretigny in 1360; "the treaty with King John," so frequently referred to in the disputes between Henry VIII. and the French on the subject of Cowbridge, near Ardres, in 1540. The limits assigned by the treaty are thus given in Rymer:

"Item habebit Rex Angliae castrum et villam de Caleys; Castrum, villam, et

Harl. MS. 380, entitled "A Rental of the Crown Lands and Revenues in Calais and Guînes and the marches therof, 6 Ed. VI." is an account of the holdings in Calais and the Pale. The names of several are given, but their position and extent are not described. The rents of the parishes differ from those given in the survey. This MS. has apparently formed the groundwork of all that is known about the English Pale by French writers.

A MS. in the Public Record Office, described as Calais, Liberties, and Privileges, 1 Hen. VIII. Duchy of Lancaster, Class xxv. m. n. 23. gives an account of many of the ancient customs and privileges of the Pale. It is a recapitulation and confirmation of early charters.

Of printed books which have been consulted, the following are the chief; but it must be remembered that with regard to French works on the subject, there is a natural absence of information so far as the period of the English occupation is concerned, and it must be added that the writers have in most instances copied the earlier works. In point of date the earliest is: (1) *Les Annales de la ville de Calais et du pays reconquis*, by P. Bernard, 1715. (2) The next, *Histoire de la ville de Calais et du Calaisis*, by le Febvre, 1766. This is a large work in two volumes 4to. with maps, plans, &c. (3) The *Notice Historique sur l'état ancien et moderne du Calaisis de l'Ardresis et des pays de Bredenarde et de l'Angle*, by P. J. Collet, 1833, is good for the information about the immediate neighbourhood of the Pale, but is hardly original. (4) The *Annals and Legends of Calais*, by R. C. Calton, 1852, is a pleasant account of the town and district, but deals more with the romantic history of the place. (5) *Les Annales de Calais*, by C. Demotier, 1856, gives the chief events concerning Calais in chronological order, but most of them belong to the period subsequent to 1558. (6) *Les Tablettes Historiques du Calaisis*, by C. Landrin, 1888, are very interesting and cover very many points; but the learned author is more concerned naturally with the place as affecting the history of the Huguenots. (7) The *Dictionnaire Historique et Archéologique du département du Pas de Calais*, published by "La Commission Départmentale des Monuments," and compiled by M. l'Abbé Haignèré, is a very excellent work, and one which would prove a good model for a history of any district. (8) Harbaville's *Mémorial Historique et Archéologique du département du Pas de Calais*, 1842, gives very slight notices of the parishes. (9) Ernest Lejeune's *Histoire de Calais et des Pays circonvoisins*, 1880, is based very largely on the earlier works already mentioned. A few plans, &c. are given, but the extraordinary number of printer's errors make the work less useful than its predecessors. (10) Brullé's notes of the Calais street names is a useful and careful tract. Of course for accounts of the Pale in English times, the two volumes published by the Camden Society, viz., (11) *The Chronicle of Calais*, edited by John Gough Nichols, 1846, and (12) the *Commentary on the Services, &c. of William Lord Grey de Wilton, K.G.*, edited by Sir Philip Egerton, 1847, are by far the best and most interesting. These give some of the maps and plans to be found in the *Cottonian MS.* Aug. I. ii.

dominium de Merk; Villas, castra et dominia de Sandgate, Coloigne, Hammes, Wale, et Oye, cum terris, boscis, marois, rivis, redditibus, dominiis, advocationibus ecclesiarum, et omnibus aliis pertinentiis, et locis, interjacentibus infra metas et bundas quæ sequuntur; videlicet, De Caleys usque ad filum rivi coram Graveling; et etiam, per filum ejusdem rivi, totum in circuitu Langle; et etiam rivi qui vadit ultra Poil; et etiam per eundem rivum, qui cadit in magnum lacum de Guynes, et usque Freton; et exinde per vallem, in circuitu montis Calbally, includendo eundem montem, et etiam usque ad mare, cum Sangate, et omnibus suis pertinentiis.

Item, dictus Rex Angliae habebit castrum, et villam, et totum integraliter comitatum de Guynes, etc."

Of the places above mentioned most will be at once recognised on referring to the modern map (Plate XXVI.), but a few of them need some explanation. Langle was the south-east part of the territory called by the English in later times The Hook. In modern times the country outside this Hook is called by the French the Pays de l'angle. The "Poil" cannot be identified with any modern name. The *Lacus de Guynes* was Guînes Plash, now drained. Montis "Calbally" is rendered in the French copy of the treaty "Calkully," whence some writers have claimed that it referred to Calkwell, but as there is no high ground there, nor was there any frontier in that part, it is clear that the Mount Cople of the survey of 1556 (Mont Couple of to-day) was meant, the English boundary being outside of it.

The northern boundary of the English Pale was the sea, and commencing at the western end by the cliffs of Scales with the headland of Blancnez, then called Blacnes, next came the dunes of Sandgate, which led to the saltmarsh called Dykeland, until the mouth of the river of Hammes was reached at Calais. Ascending this river, which was the continuation of the haven of Calais, the fort and sluices of Newenham Bridge were reached, and then large plashes or flashes, as they are still called in Hampshire; after these the river, on which at the various bridge heads were the bulwarks or forts forming the real line of defence. Into Calais Haven also fell the river of Guînes, which, after leaving that town, traversed the large marsh lands lying south of the great stony bank from Newenham Bridge to Mark, and having crossed the parish of St. Peter's entered the town of Calais in canal form. East of Calais the land on the sea-shore was low and subject to the inroads of the sea. The actual shore was called the Hemmes or Flow Marsh, in French *renclôtures*, behind which the Polders and

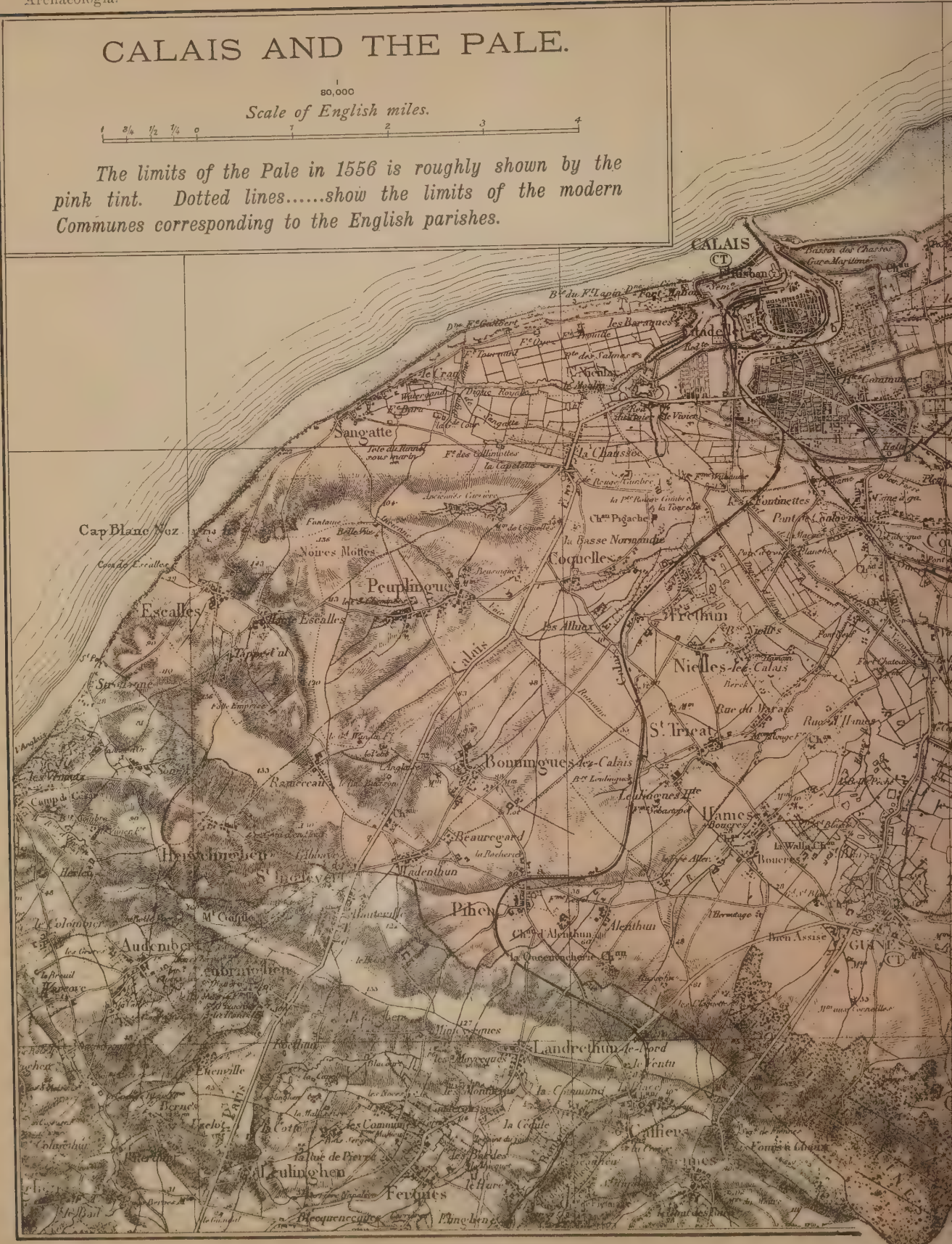
# CALAIS AND THE PALE.

1
80,000

*Scale of English miles.*

1 3/4 1/2 1/4 0 1 2 3 4

*The limits of the Pale in 1556 is roughly shown by the pink tint. Dotted lines.....show the limits of the modern Communes corresponding to the English parishes.*



Gd. Fort Philippe
Petit Fort Philippe
les Hemmes
Les Dunes d'Oye
Banc-à-Groseilles
l'Etoile
les dix Censes
Tancral
Oye
SPRURY
Pont d'Oye
Basses Communes
Marck
Le Beau Marais
Offekerque
St. Omer-Capelle
Ville Eglise
Vieille Eglise
le Marais
Guemps
le Courgain
le Pont sans pareil
Fort Bastard
Petit Renau
Hennuin
Pont de Pierre
Nortkerque
Basse Pologne
Rossignol
Badinghem
Bredues
Antmeues
Nielles
Recques
Pouncove
Landrethun
Le Communal

Cling[a] formed an intermediate district behind which again the arable lands of Mark and Oye lay. So the English territory stretched up to Gravelines and even beyond,[b] for the modern Canal de Gravelines or straight cut to the sea did not exist, and the waters of the Flemish Gracht, now the Drach, found their way to the sea some distance east of the present port. Though the Sluice Haven and its southern continuation the Gracht was considered the English frontier, it seems that a large piece of land bounded on the east by the modern River Aa and

[a] The word Cling I have not found in any dictionary in a suitable sense, but Mr. Norman, F.S.A. informs me that the similar word Clink, which occurs in the topography of South London, was there associated with a street between the river and the site of Winchester House. Clink Street still exists, and is crossed by Stoney Street. Cling and Polders may then be the term for expressing the idea of a stony steep of land near the shore, and the polders or dyked pastures.

[b] The ancient limits of the Pale on the north-east appear to have extended some distance beyond the present canal or river connecting Gravelines with the sea, and the following note in the survey of 1556 explains this:

The East Hemmes of Oye: The town of Gravelin as tenants to the Eschevins of S$^{t}$ Omer and they as tenant to the C$^{te}$ de S$^{t}$ Pol, who holds the same of the grant of Edward, pretend that a piece of land called S$^{t}$ Polles Hemes, which they say is so much ground as is contained from the sea on the north between Gravelin Havon on the east and the level of the three posts or stakes set as it seems in our level levelling from the sea to the uttermost of the Spriory lands towards Flanders; although they seem to have been none other than stakes fitte for the cattle to rubbe on, the which clayme our auncyente recordes of rentale and enquines for the Lordshippe of Marke and Oye do dysprove, the same rentales and enquines butting and lymyting the *farme of the Greate Coppe* easte upon the Havon of Gravelyn and southe on the *Lyttell Coppe Hemmes* and the beake waye and butting the *Lyttell Coppe Hemmes* easte upon the Greate Coppe Hemmes and south upon the *Sluice Hemmes and St. Pole Hemmes*, and butting the Sluice Hemmes east upon the Havon of Gravelyn and *St. Pole Hemmes*, whereby it appeareth that the S$^{t}$ Pole Hemmes lande lyeth in canton-wise against the river within of the Sluice Hemmes and stretched on no further to the north than a waye which was called the Beake waye. For so much as the butting of the Lyttell Coppe Hemmes easte against the Greate Coppe Hemmes and the Greate Coppe Hemmes butting east upon the river do prove that the Greate Coppe Hemmes stretched by the river towards the south so farre as all the Little Coppe Hemmes, and so the said S$^{t}$ Pole to stretch no further north than to a right levell from easte to weste brought by the south parte of the Little Coppe Hemmes. Nevertheless after communication thereof had by Commyssioners in the reign of Edward the VI. the matter not decyded nor concluded the said Eschevins after the departure of the Commissioners conveyed over unto the said III. stakes certain large stones for markes of their boundes graven with the armes of S$^{t}$ Omer and they laide them entending to have erected them for monuments and testimony of them lymittes there, which thing was done without agreement or knowledge of the Commyssioners and therefore are no limitts which ground as they claim contained as appeareth in the margent (*i.e.* M. $\overset{o}{\text{iiij}}$. $\overset{xx}{\text{iiij}}$. xi.)

south by a line from the sluices called the Bajettes to the Gracht, was also included in the English territory. It was called the Sprury. From this point to the Hook the Gracht, with various banks, separated the English Pale from the Imperial dominions. The English were thus in a very favourable position for those sudden changes of policy which took place in the reign of Henry VIII.

The south-western boundary of the Pale at the time of the survey was known as the Picardy encroachment, and was the result of the quiet action of the French, who gradually occupied much of the waste land included with the limits of the ancient boundary. Frequent mention is made in state documents of these encroachments, and commissioners were often appointed to determine the exact line of boundary, but the surrender of the territory about Boulogne in 1550 helped to make the definition of the two territories very vague. In 1556 the limit began at the sea shore near the present boundary of Scales parish, about half a mile north of Strones, now Estrouannes, and about $1\frac{1}{2}$ mile from the ancient boundary. It then ran south-east to Mount Pretez, not now shown on the maps, but near the altitude of 150 metres to the west of Fol Empries. Thence it turned southward to Mount Cople, the highest point of the ridge of high land running from Guînes Forest west. The boundary then passed along the south of Hervelingen towards Sandingfield, leaving the hospital on the north, and following the line of the southern limit of Pitham parish with the Colway Wood on the north. From the partition of Pitham and Buccard the line ran south-east through the woodland to the chalk pits north-east of Fynes, now Fiennes.

This seems to have been the extent of the encroachment, the ancient boundary being undisturbed eastward.

The ancient boundary of the Pale on the south-west began at the coast where the stream now called l'Anglais, then Summers Brook, fell into the sea between Whitsand (now Wissant) and Strones (now Estrouannes). About 360 yards from this was a place called Linkye, and 1,230 yards along the brook was the ford called in 1556 Pont de Callice.[a] The house where the old way crossed was 300 yards to the south-east, and at 170 yards further on was the bridge and old ford of Pont de Callice, where the tolls used to be levied before the encroachment. The head of Summers Brook was 1000 yards south-east of this, and from it the boundary followed the way to Mount Cople and then round the hill on the south side. The boundary then ran east to the lazar house of Sandingfield, where the

[a] See p. 92.

road to Boulogne crossed; from this point the boundary ran eastward to Caffers or Camfers, now Caffiers, and then, inclining somewhat to the south, it passed by Fynes Mill and Fynes Hill to the chalk pits. It was as far as this that the Picardy encroachment extended. The old boundary continued eastward, drawing a little to the south till the end of the trees in Park Valley, when it turned south south-east through the woods to the great trees called Houches Brittone on the edge of Buckholt (Bouquehault) Common. It was at this point that the English street began, which, running outside the Pale as far as the chalk pits, seems to have been a still older boundary in these parts. The street took the line now shown as the southern limit of Guînes parish, and after passing the chalk pits ran apparently inside the old boundary at varying distances from it until the sea coast was reached. This English street and the two boundaries are minutely described in the survey. From Houches Brittone the old boundary ran north-east to Camp village, the eastern portion of which was always French. On reaching Ballangen the boundary skirted that parish, reaching south to the Ewlin Way at the foot of the hill called the Humblingberg. This, though not shown on the map, was probably the spot marked as 35 metres in altitude. From this point the boundary ran for a mile or so in a northerly direction till the marshy land prevented the frontier from being clearly defined until the Ballangen Bulwark was reached. From this place the great river from Boothackes marked the limits of the Pale as far as the Cowbridge, from which a line with bends and curves extended as far as Boot's Bulwark and the west end of the Polyvard.

The high country is totally dissimilar from the low country; in the former the villages are generally found nestling down in small valleys, and are often not visible till within a very short distance. The roads in this part are often winding and circuitous, while in the low country the shortest distance between places has controlled the laying out of the roads of the water communications. In the low country the inhabitants have been obliged from very early days to continually repair and keep in order the numerous ditches and banks, on the good condition of which their crops and their cattle alike depended.

"Waterworks be strange and marvellous to keep in order," wrote Sir Robert Wingfield in 1528, and he had much experience of the truth of this. The greater number of the watergangs,[a] or as they are now called watergands, date from the period of the English occupation, and they served not only for the reclamation of the land but as highways of communication in peace and war. It will be well

[a] The word watergangs occurs as early as 1209 in an inedited charter of La Capelle.

therefore in describing what the French call the *viabilité* of the Pale to note also the chief watercourses.

The oldest road in the Pale was the Ewlin Way, which starting from Sandgate ran south-south-east to the borders of Pepling, and then turning south-east, ran by Guînes to the field of Arches. It can still be traced as a narrow lane unfit for wheel traffic. From the lower end of Causie town ran the old and new ways to Boulogne and also Guînes Way. The first of these ran by Pepling down to the old Pont de Callice at the frontier. The New Bullen Way was much the same as the present high road passing by the Lazar House at Sandingfield. Guînes Way ran through the old village of Calkwell and then turned to the south-east, passing by St. Tricaise and Hammeswell, reached Guînes at its west gate, and left the town by the south gate, and continued in a south-east direction. For much of its distance it ran parallel to and north of the Ewlin Way. From the Guînes Way, at a point in Froyton parish, Fynes Way turned southward to Fynes Mill. The Bore or Bear Way ran parallel to but south of the Ewlin Way, from near the village of Stone. Eventually it separated the parishes of Andren and Camp. Another great road was the Colham Way from the river of Guînes through Colham village to Guemp Bridge. Here it changed its name to Guemp Street, and passing through that village reached Newkerk. Here it again changed its name to V Street, and passing through Old Kerk passed out of the Pale at Capel Bridge, now called Barrière de France. In Mark and Oye were other important roads, such as Procession Way, Our Ladie's Way, Bandike Street, Calice Dam, and the Way to the Sluice. There were also in this part, the Way to Tartars Land, Market Street, the Lodge Way, &c. South of Guemp Street were Slang Street, now Rue Serpentine, Knight or Riddar Street, and Middle Street. These ran in the same direction as the English street or Polyvard forming the southern portion of this part of the Pale. Of the smaller roads there were many, but as the majority of them have much changed it would be useless here to identify them all. In Sandgate were the Beggars Way, Gallows Way, Holte Way, &c. Between the Scunnage and Colham was the Delph or Elf Way, and between Bonnings and Froyton on the west of Pitham and Nele on the east ran Cokilian Street with its continuation Margaret Street.

In the lower part of Mark were Cranebrook Street, North Lead Street, Mary Lead Street, Middle Street, etc. In the southern portion of the Pale were the Buck Way from Fynes to Guînes, the Green or Middle Way, Stony Street or Rue des Pierres, the Morrell Way, etc.

In the Marsh were several banks and ways with their drains on one or both

sides, such as the New Main Wall, the New South Way, Coskie's Way, the High Thorn Way, the March Bank, Michaelmas Bank, etc. The number of banks and ways in the low country was very great, and in a report by a jury *temp.* Henry VIII. it is remarked that "every ground though it pass not two or three acres large is dyked rounde aboute."

These ditches led into the larger watergangs, which varied in breadth from eight to twenty-four feet, and formed the arterial system of the district. Of these many still exist and many new ones have been cut in some parts, whilst in others, the drainage of the ground having been effected, the old watergangs have been obliterated.

The chief waterways of the Pale were in the western part, the river of Hammes and the river of Guînes. From near Mark town ran the Havon under various names to the Sluice near Gravelines, and from it were several large water-courses branching off to the north and south, while to the west the Havon, under the name of the Old Great River, reached eventually to the great plash near Newenham Bridge. Of these feeders of the Havon the chief on the north were the North and South watergangs, running generally east and west, and joining the Havon near the Sprury. On the north side also were the continuations of several large watergangs coming from the south, such as the Flemish Gracht, now the Drach, the Harraway, now the Watergand de Nouvelle Eglise, the Sandrinne or Chauntryne, now the Sauve en Temps, the Hollet, now the Houlet. There were also others, such as the Nonnerie, the Kettings, etc. In the notes on the various parishes will be found many others, such as the Stake Mart,[a] the Ven or Fenne,[b] the Baines,[c] the Quade,[d] the Fleete,[e] etc. The inexact nature of the survey, as noticed elsewhere, prevents a close identification of all of these with their modern equivalents, but it is hoped that further information may enable a map of the country as it was to be drawn up later.

Of the defensive works of the Pale the chief were the three fortresses of Newenham Bridge, Hammes Castle, and Guînes Castle. Besides these were the series of bulwarks or small forts, in some cases actually on the frontier, in others at a distance within.

Those within the boundary consisted of a series of small works placed at or near the bridges on the roads leading to Hammes River.[f] These, which were

[a] W[d] du Trackmaer. [b] W[d] de la Vieille Eglise. [c] W[d] Banse Vernalde.
[d] W[d] Banse Dutracq. [e] W[d] Sauvage.
[f] On Little Bridge Creek in Calkwell was a bulwark not mentioned, except in the description of the Fishery. St. Tricaise bulwark was evidently on the north side of the river.

apparently only for infantry were as follows: Froyton Bulwark, Nele Bulwark, St. Tricaise Bulwark. It was between the first two that the forces of the Duke of Guise poured into the inner part of the Pale on January 2, 1558. The date of these works is not known, but the fact that some of the church bells of St. Tricaise were sold for the construction or repair of that bulwark suggests that they dated from the time of Lord Cobham's tenure of office, 2 Edward VI., as he had previously redelivered the bells to that church.

From St. Tricaise Bulwark to one of the numerous plashes ran the Rampire of Hammes with its turnpikes or entrances.

The next small work was Andren Bulwark, situated near Clairsous on the modern map. It only appears in the map of M. P. l'Espinoy[a] and the Cottonian map. Beyond this was Ballangen Bulwark, also called Jones Bulwark from the captain of it in 1545. This was a larger work, for in the 1547 Inventory its armament is given as 1 sacre, 2 fawcons, 3 slings, 5 fowlers, 5 bases all of iron, besides 19 hagbusshes and 10 handguns, in fact a battery of 16 pieces. Its position on the frontier and near the Cowbridge was important. Next came the Mount on the great river of Ballangen, also called Boothackes Mount, situated a little south of the modern Pont sans Pareil. No armament is mentioned for this in the inventory, so it was probably not so large as the last work, or the next called Boots Bulwark, situated at the south corner of Guemp parish and getting its name from a former tenant of this part of the Pale. The armament of Boots Bulwark was 2 brass fawcons, 1 fawcon, 3 slings, 4 fowlers, and 5 bases of iron, besides 16 demyhacks or handguns, in all 15 pieces of ordnance. The next works also were on the Polyvard or English street. The first, Harraway Bulwark was at the lower end of the street of that name. It was also called Habberdyne Bulwark, probably in compliment to the count of St. Pol, who had lands in the east of the Pale, and whose son John of Luxemburgh, bastard of St. Pol, *temp.* Henry V., was also lord of Haburdyne. The Red Bush Bulwark mentioned in the survey appears to have been the same. The armament of this fort was 3 slings, 3 fowlers, 4 bases, 11 hagbusshes, all of iron, and 4 demyhacks. The two next forts, Crablers and Knowles, were situated, the first at where is now Pont Neuf, and the other at the Hoke, where is now shown on the map Fort Rebus, at the junction of the Gracht and the English Polyvard. These seem to have had no guns. The size of the Gracht and the Sluice Havon would account for the

[a] This is a copy of an older map of the sixteenth century, and by the kind permission of Commandant D'Or, I was permitted to examine it in the citadel of Calais, where it now hangs.

absence of forts along the eastern line of the Pale; and the Castle of Oye, though a strong one, was so far inland as hardly to constitute it a frontier defence.

To return now to the larger works of Newenham Bridge; beyond the sketches and plan in the Cottonian MS. we know nothing of its arrangement, but there was a keep, for its bearings occur often in the survey. The inventory of 1547 gives its armament as 1 demy cannon, 1 culverine, 4 sacres, 1 fawconett, 1 organ pipe of brass, and 1 sling, 5 demy-slings, 6 fowlers, 4 double bases, 6 demy cart bases, 20 croke bases, and 5 Boymishe (Bohemian) hagbusshes on stocks, all of iron. In fact 55 pieces in all, and most of them very light; but the fort was merely a *tête du pont* for Calais. It had its own commander and garrison, and the sketch plan (fig. 1), shows several buildings. The name was probably a corruption of its Latin one *Neuna*, but the French have always called it Neuillet or Nieulay. After 1558 it was further strengthened, and a square fort with four bastions is seen in a plan of 1633. In 1680 Vauban constructed the present work on the old site, where now, as then, it acts as an outwork to Calais, and controls the letting in and out of the water of a portion of the district.

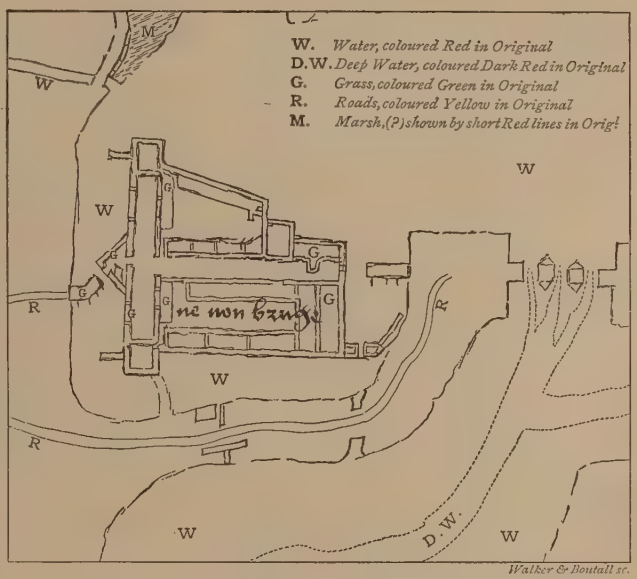

W. Water, coloured Red in Original
D.W. Deep Water, coloured Dark Red in Original
G. Grass, coloured Green in Original
R. Roads, coloured Yellow in Original
M. Marsh, (?) shown by short Red lines in Orig.
W
D.W.
R
G
M
Walker & Boutall sc.

Fig. 1. PLAN OF NEWENHAM BRIDGE. (From *Cott. MS.* Aug. I. ii. 71.)

The small plan of Guînes Castle in *Cott. MS.* Aug. I. ii. 71 (fig. 2, see p. 12), shows the castle of quadrangular form with eleven towers on its circuit, and the Catt communicating by brayes with a trefoil-shaped work at the south-east, and another at the south-west. In the *Domestic State Papers* of Henry VIII. for 1536,[a] is an inventory of the armament, etc., of the English fortresses in France. In this inventory the following places are named at Guînes Castle, and some may be identified:

[a] xi. 488.

The Mount, beginning at the east end from the Whight Gate to Preste Tower, called the short ward. The vault under the Mount. The Preste Tower. The Chapel Ward. The Long Ward. The Chamber Ward. The Catt. The Keep. The Gate House. The Ward House. The Utter Herse. The Brayes called the Doves. Pirton's Bulwark in the Brayes. The wall next the bulwark. The half-tower and its vault next. Whethill's Bulwark and vault in the Brayes. The Base Court. The North Bulwark. The South Bulwark. The court within the castle. The bulwark next the Whight Tower. The Ordnance House with its gallery, loft, and house beneath, and the chambers of crossbows and handgonnes, and of wildfire.

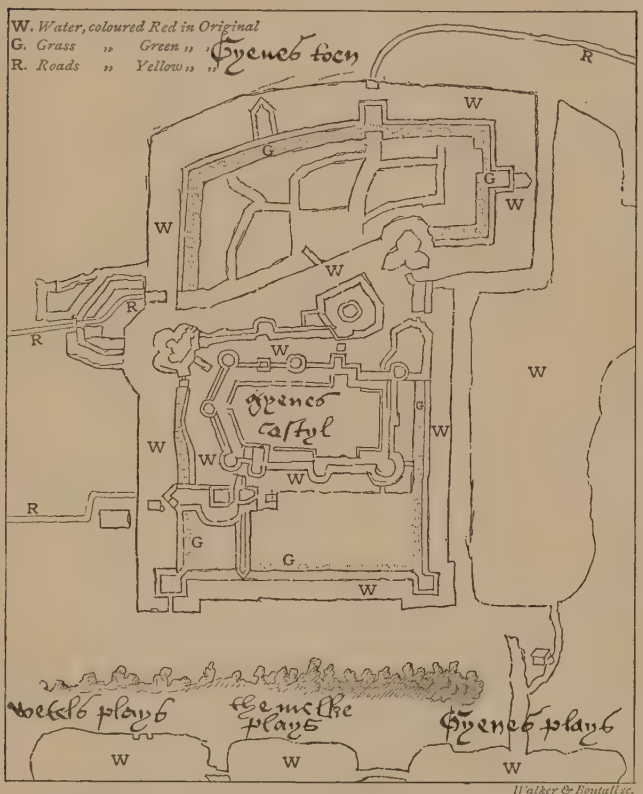



Fig. 2. PLAN OF GUÎNES CASTLE. (From *Cott. MS.* Aug. I. ii. 71.)

If any reliance may be placed on the picture at Hampton Court, the large trefoil-shaped works south-east and south-west of the castle were not built in 1520, but it is to be feared that the view is almost an imaginary one.[a]

[a] In the 1547 inventory are other notices as to towers, etc. from which we learn that of the body of the castle, next to the Old Gatehouse was the Corner tower, this quarter being toward the park hedge. The quarter between this and the Storke Tower was toward the town. The quarter from the Storke Tower to the Mill Tower was toward the marsh, and that from the Mill Tower to the Gate House was toward the Base Court. The traverse wall is also mentioned, and of the Brayes, the "cassymate." Pirton's Bulwark, the Keep, Whethill's Bulwark, the three cornered Bulwark, the Catt are all mentioned.

The clock tower, now seen on the mound of the Catt, is the second one that has been built since the English days, and dates from 1763. The cellar of this tower was used as a prison till 1794.

From the plan it will be seen that the castle was enclosed by a wall with small square towers at the north-eastern and north-western corners, and the whole, including the town, was surrounded by a ditch. The armament of the castle was in 1547, 56 pieces of brass and 230 of iron, many of the pieces being of large calibre, such as 4 cannon, 2 culverines, 22 sacres, 8 fawcons, 6 fawconetts, 4 robinetts, 18 serpentines, etc. The town of Guines also had 56 pieces for its defence. The accounts of the siege as detailed by lord Grey, Churchyard, and others mention many of the sites noticed above. Of the castle there are no remains now save some large banks and the great circular mound on which stood the Catt.

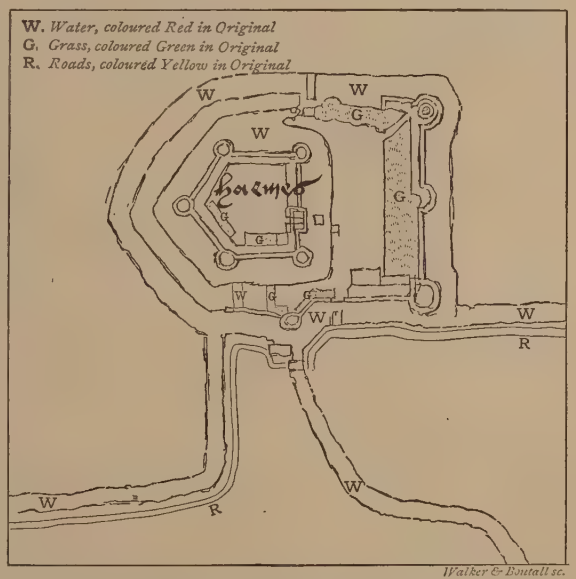



Fig. 3. PLAN OF HAMMES CASTLE. (From *Cott. MS.* Aug. I. ii. 71.)

Hammes Castle is figured in small sketches and with a little plan in the Cottonian MS. (Fig. 3). In the picture of the Field of the Cloth of Gold, also, it is seen in the midst of the marsh land, the chief object between Guînes and the towers of Calais on the horizon. The massive mounds on which the castle and its outwork stood are all that remains of the fortress, the site of which is seen on modern maps close to the farm called Fort Château. The castle was a pentagonal work with towers at each angle, and a gateway in the longer or western face, communicating with the Base Court between it and the outwork. This latter consisted of three towers with their curtains, forming a line with two flanks, the northern of which had another tower at its eastern extremity, just beyond the west face of the pentagon, and protecting the entrance from the causeway. The inventory of 1536 mentions the following localities: St. Catherine's Ward on the Mount, St. Gertrude's Tower, the Wardrobe Tower, the Entry, the New Tower, the Slepar's Ward in the tower there, the Gate to the Mount, the Gate House, the Base Court in the Mount's Tower, Worsley's Tower, and the Armory. In the inventory of 1547 the armory is given as 13 guns of brass, 71 of iron, in all 84 pieces; of which 5 were broken or not

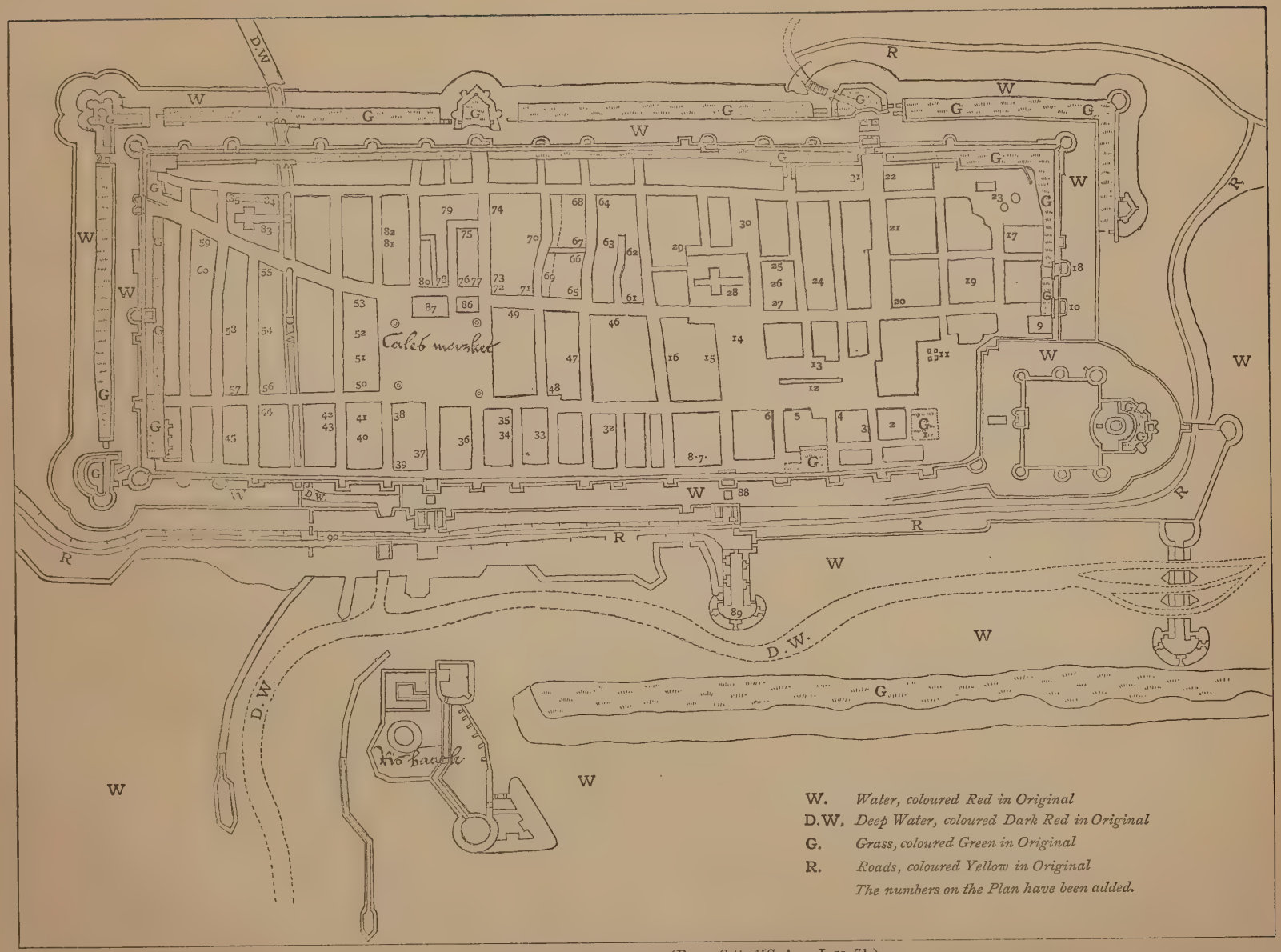

Calais market
Ho bacon
W. Water, coloured Red in Original
D.W. Deep Water, coloured Dark Red in Original
G. Grass, coloured Green in Original
R. Roads, coloured Yellow in Original
The numbers on the Plan have been added.

Fig. 4. PLAN OF CALAIS. (From *Cott. MS.* Aug. I. II. 71.)

good.[a] The fortress was strong by reason of its position, and had its captain, Lord Edward Dudley, not evacuated it by night, might have made as good a defence as did Guînes.

It will be seen that, besides Calais and its castle, the defensive works of the Pale had, in 1547, an armament of 563 pieces of artillery. These, added to the 478 pieces at Calais, etc. made a total of 1041, all of which were lost to England. It required much time and money to replace them, and Elizabeth had good reason to be economical.

Having now given some idea of the boundaries and main features of the Pale, it will be best to consider first the town of Calais, next the Scunnage or district immediately around it, and then the various parishes represented by the modern communes. These, for convenience, may be dealt with alphabetically and according to their English names. Finally, the tolls and customs of the Scunnage and other parts of the Pale, with lists of church goods in Calais and the Pale, will give some idea of the state of the district in 1556.

The Calais of 1556 included the existing town and the ground now occupied by the citadel and its ditches.[b] All traces of the English occupation, except the parish church and portions of the Staple inn, have disappeared, and the names of the streets have undergone many changes since the English left. The disposition of the streets, however, is the same as in 1556; and, with the aid of the sketch map in *Cott. MS.* Aug. I. ii. 71 (fig. 4), the sites of the principal buildings may be determined.[c]

The town, it will be seen, was in the form of a parallelogram, having to its north the harbour, or Haven; and with the parish of St. Peter to its south, west, and east. This parish of St. Peter, or the Scunnage, is now represented by the commune of St. Pierre, with the large manufacturing town of the same name

[a] A French inventory of the artillery found at Hammes in 1560 mentions only 10 pieces of ordnance, besides 3 muskets and 6 arquebuses à crocq as being there in November. Either the fort had been much reduced in strength between 1547 and 1560, or the Duke of Guise had carried off most of the guns.

[b] The citadel was made by the cutting off and partial levelling of the western part of the town. The bas-relief in stone of Neptune, now over the gateway, was found in 1600 in the sand-hills to the east of the town, and is supposed to be of the time of the English occupation. In 1632 the present arsenal was built by direction of Cardinal Richelieu, and a bust of that minister was erected. This however in 1792 was removed to make way for a "tree of liberty," and in 1818 was placed on its present pedestal in front of the Hotel de Ville, close to the bust of Eustache de St. Pierre, erected there in 1818. In 1638 the powder magazine in the citadel was erected. About 1632 the small chapel of St. Nicholas was built, but has of late years been secularised and used as a military store.

[c] I have inserted on the plan numbers to indicate such sites of buildings, etc., as I have been able to identify.

forming a suburb and indeed a rival to Calais. At the north-west corner of the old town stood the Castle.[a] It will be best to describe, as well as we may, the town, commencing at this point, and then the walls with their towers and gates. The Castle, said to have been erected in 1229 by Philip Hurepell, consisted of a square enclosure with six towers, and a larger one on its western face. Though a strong fortress it had the defect that, except at the large tower, there were no earthworks. Like other castles, it served as a palace or a prison, as occasion required. Edward III. and his queen rested here for a month after the capture in 1347, as did the Dauphin in 1558, after its recovery by the French. In 1398 Thomas duke of Gloucester was confined here,[b] having been sent prisoner to Calais by his nephew Richard II. In 1533 there was a payment for sixteen pieces of painted glass for the chapel window of the castle. Various parts of this building are mentioned in 1536 and in 1547, such as the Dongeon within the Castle, the Brayes, the Watch House, the South Tower, the Gate House, the Shaking Tower. On the north-east, the Gunpowder Tower, the Ladder Tower, and the Artillery Chamber. In this last are mentioned, "feighting bills of brymingin making," an early notice of Birmingham manufactures. In 1547 the armament consisted of 56 pieces of iron and 28 demyhacks (hand-guns).[c]

Besides the castle the town was defended by several towers along the walls. The whole enceinte was for certain purposes divided into 17 wards, but for others into 6 quarters. Commencing at the north-east corner, the highest ground in the town, the king's deputy had charge of the walls and towers from the Beauchamp Tower and its bulwark along the east side of the town, as far as the Milk Gate. This quarter included four towers, and the armament of Beauchamp Tower,

[a] It has generally been said that the castle was destroyed in 1560, but from maps and plans of 1633, signed by the Minister Argenson, and now in the British Museum, it will be seen that in that year the castle still existed, though only possessing the eastern gate tower, the north-west and south-west angle towers, and one on the south face. In later plans only the north-west and south-west towers are seen, and in one of 1793 the castle is seen only as the cavalier of the north-west bastion of the new citadel, the western face of which bastion is formed by the Brayes and two towers shown in the Cottonian plan. It is these towers, and not parts of the old castle, which still form part of the modern citadel. All traces of the castle have now disappeared.

[b] According to Holinshed, his murder took place in the Prince's Inn, Calais.

[c] The armaments given above are those in 1547, as noted in the Brander MS. *penes* the Society of Antiquaries. The armament of the different towers in 1536 will be found in State Papers, Domestic, Henry VIII. xi. 488, but it is probable that there was not much difference between those of 1547 and of 1556. Mary, we know, attempted to reduce the garrisons by cassing or discharging some of the soldiers, but her inability to clear off the arrears of pay prevented this being done in many cases.

on the site of which now stands the lighthouse,[a] and its bulwark was a strong one. It consisted of 53 pieces of artillery, including two cannons.[b] Stretching along the east, south, and part of the west sides of the town were also the Brayes or low works for infantry, in the ditch and connected with the various bulwarks or advanced works by light bridges. It was along the Brayes that the scout watch patrolled.

The High Marshal had charge of the walls from the Milkgate or Millgate round to the Prince's Tower. This quarter included the Milkgate[c] at the end of Milgate Street; the Develyn or Dublyn Tower, with its bulwark at the south-east of the town; the next or East Watch-tower; the Day Watch-tower; the sluice by which the Guînes river entered the town; another tower; and then the tower of Our Lady on the walls. There was one small tower still west, and then the Prince's Tower. The Develyn Tower and bulwark were strongly armed, having some 65 pieces of artillery, including 2 cannons.

The Comptroller was in charge of the works from Prince's Tower as far as the Bullen Gate. This quarter included three small towers, then the Northumberland Tower, and west of that, two more towers. The Prince's Tower, which had a bulwark or outwork, got its name from the Prince's Inn, a part of the staple buildings. The armament of this quarter was 26 pieces of artillery, mostly light ones.

The Treasurer was in charge of the western end of the town, which included the Bullen well quarter,[d] and extended up to the castle. This Bullen Gate was one of the most important of the entrances to the town,[e] and had in front of it a bulwark. Next to this tower was a small one, and then came the Corner Tower, with another tower on the Brayes in front of it.[f] North of the Corner Tower were

[a] Demotier says, that it was on the spot called La Coulevrine, a name the site had acquired after 1713, when the famous Coulevrine de Nancy was transferred thither from Dunkirk. This gun was in 1764 sent to Douai and melted down.

[b] The cannon in 1588 was a sixty-pounder with a bore of 8 inches.

[c] The Cottonian plan shows a double gate at the end of Milgate Street, but in a more exact plan of 1633, signed by the French minister Argenson, the gate is not seen. The Day Watch-tower is shown as a large closed work, and named Tour de la Grille.

[d] In this part, but to the east of the gate, was the Queen's Tower, at the end of Exchequer, or Chequer or Farthing Street. Other towers, as the Mermayden Tower, etc., were hereabouts, but cannot be attributed with certainty.

[e] There were fifty-three guns mounted on it.

[f] The Snayle Tower and Snayle's Bulwark is mentioned as on the south-west, but more definite description is not given.

three towers, the second and third of which were respectively the Under-Marshal's Tower and the West Watch-house. Where the Brayes ended opposite to the first of the three was an angular tower. The armament of this quarter consisted of 25 pieces, including 2 cannons on the Boulogne gate.

The counterscarp of the town ditch turned to the north-west, near the Watch-house, so as to include the castle, and then due west to a large tower connected by a curtain with another at the west end of the wharf. These two towers and their curtain form the face of the north-west bastion of the present citadel, and are all that remain of the old works of Calais. From the tower at the wharf ran a pier or jetty, which formed the west boundary of the West Haven. There were gaps in this jetty to allow of vessels passing through to Newenham Bridge, and at the end of it, almost touching Rushbank, was a fort.

Commencing now at the north-west corner of the town,[a] the Under-Marshal had charge of the five towers west of the Water Gate. The fourth of these was the Woodhouse[b] Tower and the fifth the Old Calais Tower. In front of the Water Gate was another jetty or pier, at the end of which was the Searcher's Tower.[c] Beyond this were five more towers on the walls, the last of which, the Rose Tower, was the limit of the under-marshal's charge.

The Master Porter commanded the rest of the north front from the Lantern Gate to the Beauchamp Tower, including five small towers and the outfall of the Guînes river into the town ditch, along which it ran westward to the end of Pickering Street, where it ran beneath the wharf into Fisher's Gap.

The Lantern Gate had over it a watch-house and a lantern, the service of which it was claimed was hereditary. Below the lantern was the Banket room, payments for the repair of which occur frequently, temp. Henry VIII. In 1533 occurs one for "The Banket House over the Lantern Gate, new glazed." Two

[a] This was called the Castle Hill Quarter, and between the north-west corner and the Water-gate there were some nine pieces of artillery.

[b] John Woodhouse, whose arms were formerly to be seen on the walls of St. Mary's church, was Mayor of Calais in the 13th Henry VI.

Thus, according to the survey, there were for the defence of Calais, in 1547, 478 pieces of artillery, of which there were 56 in the castle, 238 on the town walls, 59 in Risbank, and 125 in the Ordnance House. In 1533 there was 284 pieces in the town.

Highfield, in his memorial to Queen Mary in 1558, says there were at the time of the attack more than 60 pieces mounted in the town.

The French say that by the capture of Calais they gained 300 pieces of brass and as many more of iron.

[c] Now Cap Gris. There were 13 pieces mounted here.

guns were kept in this tower, loaded from Michaelmas to St. Andrew's day, in fact, during the herring fishery. They were chiefly used for signals or alarms.[a]

Opposite the town stood the fort called Risbank or Rushbank,[b] now Risban. In the Cottonian sketches it is shown detached from the spit or bank, but it is now part of it. It is said to have been built by John of Gaunt, 1348-1361, and was originally called La Tour Neuve or du Lancastre.[c]

In 1547 the armament was some 59 pieces, and the small arms consisted of 35 handguns, 20 bows, 50 morris-spikes, and 40 bills. From these we may judge of the strength of the garrison. The following places are mentioned in 1536: the countermure, called the base court in the Mount, the kitchen, the middle hall, the constable's chamber, the leads, and the new tower. Of its appearance temp. Henry VIII. the *Cottonian MS.* Aug. I. II. 57 *b*, gives a very good idea.[d] Rysbank was the title of a pursuivant-of-arms, others were named Guînes and Calais.

Demotier says that documents at Lille mention the erection in 1444 of the first jetties. In 1533 a west pier was built, and in the survey of 1556 the east and west jetties are mentioned.

The streets of Calais have changed names so often that it is useless to do more than to identify the present names with those obtaining in 1556.

It will be seen that with the exception of La Rue des Prêtres, La Rue des Boucheries, and the case of La Rue de l'Etoile, noted elsewhere, the names of to-day have little in them to recall the English titles. Nor is it to be expected, for though Edward III. did allow three persons to remain in Calais to assist in the redistribution of lands, etc.,[e] there is no record of such being the

[a] The Port du Hâvre, the gate painted by Hogarth, is on the site of the Lantern Gate, but is and was in his time a French work. Bernard in 1702 speaks of it as "proprement travaillée et ornée d'une trophée aux armes du Roi et à été ainsi réparée en 1690." Now the French have so carefully obliterated all traces of English arms, badges, etc. everywhere in Calais, that, accepting Bernard's distinct statement, it is clear that Hogarth, who finished his picture from memory after his return to England, could never have seen the arms of England on this gate. Nor, had they been there, would they have been shown as he has painted them. Hogarth was at Calais in 1748, nearly fifty years after the French king's arms had been put on the gate, and in his diary he only says, "some appearance of the Arms of England." The gate as he saw it was probably built in 1633, when the old English works were modified and adapted to the improved ideas of fortification.

[b] Rushbank, as it is called in the survey, probably was the original form of the name.

[c] Demotier says it was built in 1405.

[d] In 1586 the fort was altered so as not to command the town. In 1602 bastions were added, and it is now a very strong work.

[e] Mr. Haignèré says that some of the French inhabitants afterwards returned to Calais and

case when the Duke de Guise took the town. There was indeed a certain Doctor Philibert Garry, mentioned as being in the town and giving assistance to the French at the time of the capture, but there was every reason for the new possessors to obliterate so far as possible all traces of the English occupation. But among the names still to be seen in Calais are a few such as Tartare (Tartar's land in Oye), which recall those of the old occupiers.

Of the streets no longer existing, whose sites are occupied by the modern citadel, the following occur in the survey: Fuller or Silver Street, Golden Street, Watergate Street, Boulogne Gate Street, Cow Lane, Shoe Lane, Farthing or Exchequer or Chequer Street, Penny Street, with its prolongation, Old Haven, and some other little lanes. These ran north and south, and were traversed by Castle Street, St. Nicholas Street, and Hemp Street, running east and west.

Taking now the streets existing to-day, and beginning by the north part of the town, that is, all north of Castle Street, now Rue de la Cloche, and at various periods Rue de Han, Rue de Lorraine, and Rue du Château, we commence with Maisondieu Street, now Rue des Pélerins. Next was Love Lane, now Rue des Cinq Boulets; then Prison Lane, now Rue du Port; Coxe Street, now Rue de Paradis; St. John Street, now Rue de Thonis; Whethill Street, now Rue du Soleil, and at one time Rue du Maréchal; Staple Court Street, now Rue de la Mer, and at various times Rue de la Flèche and Rue du Vieux Major; Lantern Gate Street, now Rue du Hâvre, at one time Rue de la Lanterne; Pickering Street, also known as Bentham Street, or Ladie Street, or Calkwell Street, is now Rue de la Tête d'Or, and has been called Rue M. Rémond; Bigging Street, now Rue de l'Etoile, at one time Rue de l'Ange; Larden Street, now Rue de la Poissonnière; James Shaft Street (after an old tenant of that name) is now Rue de Courtenvau, after the French savant; it has also borne the names of Andelot, and Clery; Bucket or Broket Street is now Rue des Mariniers; Old Fisher Street is now Rue Berthois.

In the central wards, that is between Castle Street and St. Nicholas Street, were the following: Maisondieu Street, now Rue St. Nicholas; Coxe Lane, now Rue de la Harpe; a little lane now Rue du Lion Rouge, and at various times Rue Calandre and Rue Changée; the Market Place, now Place d'Armes; Foxton Street, now Rue du Cygne (it has also had the names of Anjou and Hubert); Larden Street, also called by the English New River Street, Burnett Street;

mentions the grant by Edward III., 8th October, 1347, to Eustache de St. Pierre of a pension of 40 marks for services rendered in maintaining order in the town.

Lardover Street and Martyn Street is now Rue de Croy, but has also been called Rue de la Corne and Rue d'Orléans; Duke Street, now Rue Eustache St. Pierre, and at one time Rue d'Angoulême; Parsonage Street, now Rue des Prêtres; and Old Fisher Street, now Rue Berthois.

In the south of the town Maisondieu Street is now Rue du Roule; a little lane, now Rue du Hazard, has also had the names of Rue St. Martin, Rue des Archers, Rue des Arquebusiers, and Rue qui n'a point de bout; Coxe Lane is now Rue de la Douane; Little Friars Lane has been built over: Great Friars Street is now Rue Leveux, but has been Rue des Capucins, Rue de la Comédie, Rue des Petits Audouilles, and Rue des Minimes; Shewe Street, now Rue Royale, has been Rue de Diane and Rue des Carmes; Roper Lane, now Rue de Guise, has had the names of Guise, de l'Etape, and de la Prison; Brampton Street has been built over; Myngraven Street, or Mingraveling Street, or Our Lady Street, is now Rue d'Admiral Courbet, and has been Rue Ste. Catherine and Rue Neuve; Langham Street is now Rue St. Michel; Bingham Street is now Rue St. Denis. This portion of Larden Street is now Rue de la Rivière, and has been Rue de l'Eglise; Stewes Street is now Rue du Presbytère.

Of the streets running east and west, Castle Street, also called Benchcourt Street, is now Rue de la Cloche, and has had various names; Samport Street is now Rue des Camionneurs; St. Nicholas Street, now Rue de la Citadelle, has been Rue Royale and Rue de Boulogne; Milgate Street, now Rue Notre Dame, has had the names of Pedrowe, d'Orléans, and du Maine; Hemp Street, as far as Rue Leveux, is now Rue Françoise, east of that it is Rue des Maréchaux.

The Butcheries is now Rue des Boucheries, and has been Rue du Cardinal.

Other streets are mentioned in the survey, but have not been identified, except Mynte Lane, which of course ran by the Mint between Penny and Farthing Streets; Havering Street or Bishop Street was near Prince's Inn; Butt Street was near the foundry; Boundegarde Street was in the east of the town; Canwayke Street and East Calais Castle cannot be identified at all. Randall was appointed constable of the latter in March, 1356.[a]

Bigging Street was, like its namesake in Dover, probably called after the Beguines.

Commencing with the portion of Calais no longer existing, at (1 on plan), on what is called in the survey the Great Hill or Castle Hill, stood a windmill.

[a] A very interesting note on the old street-names of Calais, by M. Brullé, was published in 1880.

East of this at (2) was the king's foundry, occupying in 1556 the former site of a brewhouse. At this foundry in 1515 the brothers Owen had worked, and some of their guns are still to be seen in the Tower of London. Further east at (3) stood the great house place called the Cappel of St. John, now called Tholie Roode, "with a voide place lying in the same, which was edified, called the new Garier (? Garner), and ordeyned to be occupied with the king's victuals and other stuff, and one part under the chappel for the king's plomerie and another for the storage of the king's stuff." The chapel of St. John the Baptist is mentioned as early as the year 1226 in a charter of the Abbey of St. Bertin, where the site is described as being that on which mass was first said in Calais, "but now deserted." Certain rents were assigned at this date (1221) for the maintenance of a chaplain. In the payments for the year 1518 is one of 20*l.* for Seynt John Baptist. However, it was disestablished soon after this, and converted into a store for lead and other munition, being let to John Luson, merchant of the Staple.[a] East of the chapel at (4) were fifteen almshouses belonging to the wardens of the "Brothered of St. George" in the church of St. Nicholas.

At (5) was what in the survey is called Old Calais occupying all the quadrant or block, and held by Thomas Brook, and late by Lord Rivers. Of this place or its name no traces have been found in the papers of the period.[b]

At the south-west corner of the next block Lord Grey held a mansion with three tenements and cellars, and a cellar called the Vine (6). The next street was Watergate Street, running from the Watergate southward, and in the block on its east were the official residences of the Master Mason of Calais (7), in 1556, Nicholas Thompson, and next to it "the Mason's Lodge of the Company of the king's Master Masons of Callis, built at the king's cost as well for the storage of His Highness' stores and other necessaries" (8). Both of these holdings faced north.

Commencing again at the west, adjoining the castle wall, was the Castle Garden (9), held by the captain of Calais Castle; it touched the West Watch-house (10). Somewhat east of this, and standing on the king's ground, was the South Mill (11), held by Robert Whethill. South of Old Calais was the Tylte;

[a] Dufaitelle says that remains of this chapel were to be seen in "une ancienne dépendance de l'arsenal de la marine, Rue du Soleil," and that they dated from the twelfth century. But that street, the Whethill Street of the English days, was further east, and the remains must have been of some other building.

[b] John Duke of Bedford held this as appears by his p.m. inquisition temp. Hen. VI.

(12)[a] and in the plan is seen the wooden barrier, on each side of which the jousters rode. On the south of this, at (13), Richard Carr, or Carye, man-at-arms, held a "Powder mill, called a Horse mill;" and further east was a block of buildings (14) called the Grene Yard, formerly held by Lord Berkeley, but of late forfeited to the King, it having been allowed to fall into decay. It had at one time consisted of a woolhouse, brewhouse, and tenements, with cellars, gardens, and void ground.

On the opposite side of Watergate Street, at (15), stood the King's Weigh-house, for tin and lead, and a large portion of the same block was occupied by the King's Carpentrie (16), consisting of a mansion, garden, and void ground. Here was stored the timber used for fortifications, etc.; and most of this, as may be seen from the frequent mention of conveyance from foreign parts, was imported. Colway Wood in the Pale probably did not furnish the large stuff necessary for the repairs of the sea front, etc.

We begin again at the west end of the town, and the survey notes that part of the quadrant or block in which, in 1556, was the cottage called Mill Hill (17), had "lately been taken into a mount or battery close to the Under Marshal's Tower" (18). In the block south of St. Nicholas Street and east of Fuller or Silver Street, was a piece of void ground called Golden Hill (19), which gave the name to the next street on its east. In the next block, at its north-east corner and fronting on Boulogne Gate Street and St. Nicholas Street, was the Garderobe (20), held in 1556 by Richard Blunt, the Master of the Ordnance of Calais, by virtue of his office. This place consisted of "a great place with a garden and yard, and other storehouses appointed for the habitation of the Master of the Ordnance for the time, and stowage of the king's artillery and munition.[b]

[a] This place, at one time called the corn-market, *Mercatum Granorum*, is often referred to under this name in old documents.

In 1537 a house near the Tilte called Mounteney's House was granted to Rob. Ap Reynolds.

[b] This large storehouse consisted of several rooms and lofts in which were kept the necessary supplies for the defence of Calais. The different parts of the house may give some idea of the building. They were: the long court; the little court next; the court within the gate; the great grene yard, where there was a great bombard of iron, the only gun of its class in Calais, the room under the stairs going to the high tower; the long gonne house, where were kept 14 blacke cartes covered with haire, having 4 bases with 3 chambers to each chamber; 3 shrympes with 3 bases, &c. 22 single bases; also 9 sacres, 11 fawcons, 2 fawconetts, 8 organ pipes, all these of brass. Then the great gonne house, in which were 6 great port pecis of iron. Beneath this was the casting vawte, the forge, the wildfire house, the house above the stair head, the cresset loft, the coller loft (in this, among other stores, were "dartes for Irishmen croked," *i.e.* barbed darts for the troops from

In the block south of this, and fronting on Boulogne Gate Street, were certain houses and ground occupied by the King's Bakehouse (21); and somewhere to the south of this last stood, as far as we can judge, the ancient Hôtel d'Escalles,[a] the palace or mansion of the Lord Scales (22). The ground in the south-west corner of the town was called Bullen Well, and consisted of a space 200 feet square. On this spot was a conduit of fresh water, given to the Mayor, Aldermen, and Burgesses of Calais by king Edward IV., chiefly for the profit of the town, and especially for purposes of brewing.[b] In the plan two wells are shown, and in

Ireland, (of which a party is seen in the Cowdray picture of the siege of Boulogne), the little chamber next, the speare loft, the arrowe lofte, the armery where armour was stored, the hand-gonne chamber, the malle chamber, the crossbow chamber, the salt peter house, the iron house, the great vault. Opposite the Ordnance House was another great storehouse with a powder house, Morris picke house, with a long house underneath; another long house, the Myle house, and last the Foundry. It is not quite clear if this was another foundry, or the one mentioned in the survey, to the west of the Ordnance House. The Foundry consisted of a yard, the workhouse, the forge, and the iron house.

[a] Bernard says in 1702 that this building still stood in the citadel, and till 1636 the governor of the town always resided there; also that within his memory many of the old houses of the town had remained in existence in the citadel. Civilians continued as late as 1660 to reside there, but at the date of his writing there only remained the quarters of the Lieutenant du Roi, the Major, and also the barracks.

[b] Beer brewing in Calais was a very important concern, as is evidenced by the number of brew-houses, and also by certain remarks made at the time of the capture of the town by the French. In 1532 the Council of Calais say, the Picards, who buy flesh and other victuals twice a week, always take back beer brewed in Calais. There were in Calais in 1556 at least six brew-houses, besides the great brew-house of the king called the Swanne, the position of which last is not known as it is not mentioned in the survey. A license was required for holding a brew-house either in the town or in the Pale, and if the outside world was to be supplied with beer, as is suggested by the note of 1532, a good deal of this English liquor had to be made.

Lord Wentworth, the last lord deputy, in his letter to queen Mary on Jan. 1, 1558, at 10 p.m., when speaking of the measures he had taken for defence by cutting the ditches and flooding the country round the town, says: "I would also take in the salt water about the town, but I cannot do it by reason I should infest our own water wherewith we brew; and notwithstanding all I can do our brewers be so behindhand in grinding and otherwise, as we shall find that one of our greatest lacks." John Highfield, master of the Ordnance at Calais, in his narrative of the capture of Calais addressed to the queen, also says: "And then (Jan. 2, 1558) it was moved to my lord deputy that the sea might be let in as well to drown the Causeway beyond Newenham Bridge, as also other places about the town, wherein was answered, 'not to be necessary without more appearance of besieging,' and because that 'the sea being entered in should hinder the pastures of the cattle and also the brewing of the beer.'" Beer, it must be remembered, was a very important part of the soldier's ration, and Captain Robert Hitchcock, who served under Charles V. in 1553, and after-

the modern citadel there is still a well lying within the Bastion de Terme or Thermes. In 1528 there was also a lime-kiln close to this spot (23).

In the block between Cowe Lane and Farthing Street, and separated from St. Nicholas Street by a piece of void ground, stood certain tenements forming part of the Exchequer (24). The main portion of this office (25) was on the east side of Farthing Street, or as it was also called Exchequer or Chequer Street. This, with the Treasury (26) and the Houses of Mynte (27), occupied the whole block from St. Nicholas Street to Mynt Lane. Here were struck the Calais pieces,[a] and the whole quadrant was held for the king's use by the treasurer of Calais (Thomas Cornwallis in 1556). A room in the Exchequer called the King's Great Parlour is often mentioned.

At the corner of St. Nicholas and Penny Streets stood the parish church of St. Nicholas (28) in the midst of its churchyard. Sir William Pelhouse, clerk, held by demise of the commissary the house and ground called the Anker House adjoining to the south side of the church. This was evidently the former habitation of an anchorite or hermit. The church, itself, one of the most historically interesting buildings in Calais, of course no longer exists, and of its appearance we can only judge by the conventional sketches in the Cowdray picture and the Cottonian MS. It appears to have had a square steeple of three stages. In 1518 it was in a bad state and leave was given to the churchwardens to beg for one year in England for money to make good the structure. Its steeple being a beacon for mariners was one of the reasons assigned for this permission, which soon after was extended for a period of three years. In the survey, however, the steeple of the church of Our Lady is the one most generally mentioned when the bearings of any place are mentioned. In the church was a chantry of the Brotherhood of St. George and it was this body who held fifteen almshouses in the north of the town. There was also a chantry of the rood loft, sometimes called of the roode service (if they were not two different chantries). In 1420 Nicholas Midylton was presented to the chantry called the rode lofte in the church of St. Nicholas, Calais. In 1521 John Peynton was presented to the chantry of the

wards held commands under Elizabeth, gives as the daily allowance for each soldier, half-a-gallon of double beer rated at 1d. and this at a time when the soldier's 1 lb. ration of beef was rated at 1½d. only.

[a] In 1470 Edward IV. granted to J. Langtoft, Primate of St. John of Jerusalem in England, the coinage of gold and silver in England and Calais by patent. In 1544 Martyn Parry suggested to the Master of the Mint in England that a mint for Boulogne, to commemorate its capture, should, according to custom in like cases, be established in that town or at Calais.

Holy Cross in this church, and Henry VIII. is mentioned as making offerings at the Jesus and St. George altars. The wardens of the Trinity table in this church, also called the fraternity of the Trinity in St. Nicholas, held much property in the Pale and many tenements besides herring-hangs in Penny Street and Mint Lane in Calais itself. It was in this church that Edward III. and Henry VIII. made offerings and returned thanks to Heaven after crossing the channel. Edward III. and the French king met here and embraced on the ratification of the Peace of Bretigny in 1360, and later Richard II. was married to his child wife Isabella, afterwards wife of the duke of Orleans, poet and prisoner, after Agincourt, for so many years in the Tower of London. In 1528 among the royal payments of salaries, etc. are Jesu and St. George 6*l.* 13*s.* 4*d.* In 1534 Sir Robert Skeffe is mentioned as chaplain to St. George in this church, while Sir Alexander Flecton was the priest of the parish.[a] South-east of the church were ten of the almshouses of the town (29) held in 1556 by Margaret Baynham and Leonard Snowdon alias Holland. South-west of St. Nicholas was the open space called Old Haven (30), a prolongation southward of Penny Street, though why so called it is difficult to say. In *Harl. MS.* 3880 it is called the Common Shewe of the town of old time.

On the eastern corner of the southern extremity of Boulogne Gate Street, and hard by the gate (now called Porte de Secours) was the Hermitage (31). This building, the name of which is preserved in the demi-lune or ravelin which covers the Porte de Secours or southern gate of the modern citadel, consisted of a mansion, three wool-houses, store house, cottages for almshouses, and a great yard held by Thomas Pettyt, surveyor of Calais, the individual who drew up the survey now before us. The Hermitage is often mentioned in state documents as a store house for timber and other materials for the construction and repairs of the fortifications, etc.

The above are all the noteworthy sites now obliterated by the citadel. At first the French merely cut off the western part of the town and made of it the citadel; later on this portion of Calais was levelled and the present work was built.

Taking now the existing portion of Calais, which includes parts of the north-west, middle-west, south-west and southwards, and the whole of the north-east, east middle and south-east wards, we find the blocks of houses in almost all cases arranged as in 1556. Commencing at the north-west the street next to Maison-

[a] The church of St. Nicholas was pulled down in 1564.

dieu Street was Love Lane (now Rue des Cinq Boulets), next came Prison Lane (now Rue du Port), at the south-east corner of which was the common prison (32) held by John Witamore. In 1535 it was called "the prison on the walls" in a letter to Cromwell from Lord Lisle, who also mentions that to cross the town ditch near this place "they should not wade to the calf of the leg." This prison does not appear to have been used by the French after 1558, but it is curious that when in 1825 the present Palais de Justice was erected just behind the town hall on the site of another prison, a house and ground in this block were purchased and the present Maison d'arrêt was built, occupying the greater portion of the block. The next street, Coxe Lane, recalls by its modern name Rue du Paradis, the old place so often mentioned in all accounts of Calais, called Paradise. It received its name, most probably, from one of the family of Paradise, who seem to have been tenants from the early days of the occupation up to the last. The name Petit Paradis has been given to the small basin situated more to the eastward opposite to the end of Rue du Hâvre, formerly Lantern Gate Street. Next to Coxe Lane was St. John Street about halfway down the east side of which Cornelis Wading held "a ruinous mansion" called the Redde Crosse (33). At the south-east corner of the next street, Whethill Street (now Rue du Soleil), were two tenements held by Richard Windebanke. These were called the Vaunte (34) and the Crooked Staffe (35). The three next streets, Staple Street (now Rue de la Mer), Lantern Gate Street (now Rue du Hâvre), and Pickering or Calkwell Street (now Rue de la Tête d'Or), communicated directly with the market-place, and Lantern Street was also the thoroughfare from the wharf to the centre of the town. About halfway down the eastern side of Staple Street stood the Staple Court Hall (36), described in the survey as a great house, but we do not know what this building held by John Holland had to do with the Staple itself, the principal buildings of which were in the heart of the town. Lantern Gate Street has of course a peculiar interest for Englishmen from the slight view of it in Hogarth's picture. A little below the north-east corner were "three tenements new builded, made by the name of a lodging or inne" (37) held by Thos. Meredith. In the same block, but fronting on the market place, stood "a new tenement called the Kitle" (38) held by Peter Bate's widow.

Near the north-west corner of Pickering Street was the Plough (39), and on the east side of the street Edmund Davie also held the Harte's Horne (40), whilst a little lower down Robert Whethill's mansion called the Kinge's Armes (41) extended right across the block.

In the next block at the corner of Bigging Street and Samport Street were two tenements called the Starre (42) and the Angell (43). The former held by William Tailor and the latter by Eustace Habington. Both of these houses fronted on Bigging Street, and the later French name, which indeed has continued to modern times, viz., Rue de l'Etoile, no doubt was given to it from the sign of the first of these, which would be understood equally well by French or English.

The next street, Larden Street, now Rue de la Poissonnière, had running down its centre the canalised river from Guînes. At the wall the river passed by a double arch into the town ditch along which it ran westward (within a partition) until it reached the end of Pickering Street, when turning northward beneath the wharf it fell into the harbour at the place called Fisherman's Gap. The Cottonian view of the town shows the machinery for working a sluice gate at this point on the wharf edge. At the south-east corner of the next street, James Shaft Street,[a] was a ruinous house called the Flower de Luce (44) held by Thomas Lee.

East of James Shaft Street was Bucket or Broket Street, on the west side of which Sir John Butler, clerk, held "a great mansion and gallerie and a porche" (45) in the right of his wife. This is the only house so described in the survey, and was one of his many possessions in the town and in the Pale. He had been commissary and king's chaplain in 1534, and is often mentioned in the State Papers, and not always in favourable terms. He was probably son-in-law of Lady Banester.

There were no other houses of note or specially mentioned in the survey in this part of Calais.

Commencing again at Maisondieu Street, and taking the west and east middle wards, on the south front of the block, and extending to Coxe Street, stood fifteen tenements sometime a mansion, and tenements called the Faulcon (46), held by Richard Blunt.

In Coxe Street on its eastern side about half-way down, but also reaching to Castle Street on the north, was a mansion with stables and wool-house called the Rame (47), held by Symond Jennings, whose garden and void ground formed the north-west corner of the block. The north-east corner was held by Jane Perry, who had a great tenement called the Wild Man (48), but at the time of the survey broken up into four tenements.[b] This block was separated from the next

[a] James Shaft was son and heir of Symon Shafte and Katryne his wife, daughter of Henry Hilliarde. He was born in Mark and held land there. *Augmentation Office Book*, 407.

[b] In Miraulmont's terrier La Siraine Sauvage or l'Homme Sauvage was in this street, perhaps the sign of the Wild Man was adopted by the new occupier.

one by a small lane, to which no name is given in the survey, but it is now the Rue du Lion Rouge. Between this lane and the market-place and fronting on St. Nicholas Street the Chamber of London held six tenements and void ground with a great wool-house (49).

Crossing to the east side of the market-place and leaving the buildings standing detached thereon, the first house with a name was the Swanne (50), a little south of the end of Samport Street; this was held by Robert Love. A little south, Richard Swart held a tenement and cellars called the Rose (51), and still further down John Delanoy had a similar holding called the Woolsack (52). The southern end of this block fronting on Milgate Street consisted of five tenements with cellars and void ground, and also the Crane (53). It is impossible to say whether this was an inn or a machine, but as the wool would be weighed at the town hall by the Wool Pavement it was probably an inn. All these holdings on the west side of the market-place extended right through to Foxton Street,[a] in which no houses of note are mentioned. French writers have suggested that it was really Folkestone Street, but in the 18th of Richard II. William de Foxton appears in his p. m. inquisition as holding land in the town.

Next to Foxton Street was Larden Street,[b] through which the river from Guînes ran, and the water is shown bridged over in various places. The street, now called Rue de la Poissonnière, has been entirely arched over the river, which does not show anywhere in the present town, and indeed falls unseen into the Bassin du Petit Paradis. The greater part of the block east of Larden Street was occupied by what was called Duke's Inn[c] (54), held by the Duke of Lancaster (*i.e.*, the sovereign); it is described as consisting of eighteen tenements, and extended right across the block to the next street, Duke Street[d] or Duchy Street, and down to Milgate Street on the south. On the north-west of Duke Street John Davye or David held three tenements called The Moone (56). On the north-east corner of Duke Street W. or J. Johnston held a tenement called the Exchequer (57). This was probably an inn, the king's exchequer being in the west part of the town.

South of this holding and extending through to the next street were five more tenements held by the Duke of Lancaster (58), who also had here four herring-hangs and void ground.

[a] Now Rue du Cygne.

[b] Now Rue de Croy.

[c] The "Dukes inne" was so called as early as 8 and 9 of Henry V.

[d] Now Rue Eustache St. Pierre from the famous burgess of Calais, whose house was at the south-west corner of it (55).

The next street, Parsonage Street,[a] took its name from the Parsonage (59), situated at almost the southern end of the block and extending through to Old Fisher Street. The Parsonage in 1556 was occupied by William Moots, parson of the adjacent church of St. Mary or Our Lady, as he is styled in the survey. But in Mary's reign he can hardly have exercised his calling there.

The Parsonage consisted of a mansion and garden. Near to it on the north Widow Gibson held five tenements and gardens called the Blinde Esyll (60). What this means I cannot say, but the name is so written most clearly both in the survey and in *Harl. MS.* 3880.

The houses on the east side of Old Fisher Street do not seem to have been of importance, and some of them are mentioned as having been taken a short time before the survey, for the erection of a mount or battery, which, according to the scheme for the fortifications of Calais, was "for the beating of the parke, the pawne, the downes, and the contreth all aboutes the same."

The site of Old Fisher Street, now the Rue Berthois, was the eastern limits of the French town, a large series of fortifications called the Tête de Gravelines being erected therein.

Again, commencing at Maisondieu Street, the corner of this and Castle Street was occupied by the Maisondieu, the hospital of the town (61) with its grounds, held by the mayor and aldermen of Calais.[b] South of the ground occupied by this institution was a mansion with woolhouse, storehouse, and void ground called the Nettlebed[c] (62) held by Thomas Windebank, late by the Lord Hastings.

South and east of this was the Artillery garden or ground, also called the Archery gardens (63) consisting of a tenement, great garden, and void ground held by John Jonys. This ground, which abutted east on Coxe Lane, was reached by a small lane leading also to the Nettle-bed from St. Nicholas Street on

[a] Now Rue des Prêtres, one of the very few instances of an English street name being continued on by the French.

[b] Turpyn, in the *Chronicle of Calais*, says that in 1527 "the church of the Maisondiewe, in the town of Calais, was taken down to the ground, and in the xiiij of May, in the 19 yere of Henry the Eighth was the first stone of the new worke layde." King Edward the Thirde conqueringe the towne, in all charters and patents, that he gave every howsynge or londs within the sayde towne he gave out of the same a quit-rent to the Maisondiewe, and Kyng Richard the Second dyd the lyke. Of the church there is no mention in the survey. This hospital continued long after the English occupation, and Maisondieu Street, now in this part called Rue St. Nicholas, was for some years called Rue de l'Hopital.

[c] In 1511 there was a grant to Thomas Thwaites, a spear in the King's retinue, of the tenements called the Netylbed tenements.

the north, and was the place where, as we are told in *Taylor's Diary*, Henry VIII. successfully competed with his yeomen of the guard at the national sport of archery. The lane now called the Rue du Hazard has at various times borne the name of St. Martin, des Archers, and des Harquebusiers.

At the south-west corner of the next street, Coxe Lane,[a] was a mansion called the Belstewe (64) with some twenty-five tenements, gardens, void ground, etc. all held by Nicholas Basse.

The next blocks of buildings, on the east, as seen on the plan *temp.* Henry VIII., had somewhat changed their arrangement at the time of the survey. In the former, bounded on the west by Coxe Lane and on the east by Great Friar Street, they were separated from east and west by a small lane. This ran from Coxe Lane to another, which traversed both blocks, from St. Nicholas Street to Henry Street, and was called in the survey Little Friar's Lane. This lane is not shown in the plan *temp.* Henry VIII.

At the corner of St. Nicholas Street and Coxe Lane Lord Brough held a mansion with cellars, etc. called the Christopher (65), and at the corner of the small lane running east and west, and Coxe Lane, Robert Horner and John Hilliard held a house called the King's Stewes (66), with three cottages, gardens, &c. Eustace Abington held a mansion called the Helme (67), with garden, woolhouse, etc. on the north side of this little lane, also at the corner of Coxe Lane.

On the south-west of this block, and at the corner of Coxe Lane and Hemp Street, was an oyle mill (58), held by John Buskin and Mathew Coltclough, heirs of — Tate.

On the east of Little Friars' Lane, and between it and Great Friars' Street, Lord Lysle held the grounds belonging formerly to the Friars Carmes[b] (69), with a church, mansion, woolhouses, cottages, gardens, &c. These were situated at the south of this strip of land, and reached to Hemp Street.

The south-east ward began on the east of Great Friar Street, now Rue Leveux, on the east side of which John Hounde held the tenement called The Blew Bell (70) near to which lived Nicholas Gardener, the Trumpeter of the town of Calais. At the corner of this street and St. Nicholas Street, William Johnson held "the Burdnexe (71), now called the Causkey" (cross-keys ?). Next to this,

[a] Now Rue de la Douane, the barracks of the custom-house officers being situate therein.

[b] It was in 1397 that Richard II. gave the Carmes or White Friars this site, occupied in modern times by Dessin's Hotel.

[c] Among the king's payments for the year 1518 is "Pension of the Freiers 13*l.* 6*s.* 8*d.*" In 1405 this pension is mentioned as having been given as from the time of Edward III.

and at the corner of the market-place, was a place at one time called "the lyon;" but in 1556 held by the mayor, constables, and fellowship of the staple of Calais, and used as the town prison (72). It consisted of two mansions, cellars, &c., and here, also, was a weigh-house. This prison was in use as the prison of the town from 1430 until 1828, and it was not until 1845 that the modern prison was built on the site of another old prison in the north of the town, and the Palais de Justice erected on its site.

Just south of the Town Prison the same authorities held a plot (at one time a stable) on which was the Staple Prison (73). This was evidently for the punishment of offenders against the customs of the Staple of Calais.

The whole of the southern portion of this block between Friar Street and Roper Lane (which appears to have run through to Hemp Street) was held by the mayor, constables, and fellowship of the Staple, and included "a great mansion (74)[a] sometime called Prince's Inn, and now part of the staple." This lower part of Roper's Lane, now Rue de Guise, was, in 1510, by a grant of July 1 of that year, from the King, inclosed in the staple grounds, and so connected the Prince's Inn with the other possessions of the merchants of the staple. On the east side of Shewe Street, and between it and Roper's Lane, were Shewes gardens (75) held by Lord Brough, and bounded on the south by a watergang, now arched over and made a part of Roper's Lane leading west.

At the north-west corner of Roper's Lane and fronting on the market place, Eustace Abington held a mansion and cellar called the Key (76), and on his west John Irisshe held a tenement called the Golden Coppe (77); while on the opposite corner and extending between Roper's Lane and Brampton Street (now built over) was the Crane, or Crowne (78), a mansion and tenements held by the heirs of Richard Swart.

At the south end of this block were the main possessions of the Staple (79), consisting (besides those already noted) of eight tenements and gardens, four woolhouses, and much void ground, now enclosed in the staple garden.

On this land, which at the capture of the town was given by the grateful king to the Duke of Guise, stood the Cour de Guise,[b] by which name it was consequently known; but in 1577 his son sold the whole to the town.

[a] The old brick chimneys of octagonal section with crenellated tops can still be seen.

[b] The archway leading into the courtyard has been figured in M. Hédoin's work, 1828, plate 18, and Calton's *Annals and Legends of Calais*, 1852, gives what purports to be a restored view of the gate. But little value can be attached to this last, and it must rank with another in Nodier's

On the east side of what was Brampton Street, and facing the market place, Leonard Holland held a tenement and cellar called the Scala Celi (80). The next street, Mingraven or Mingraveling Street, *temp.* Henry VI., or, as it was some time called, Our Lady Street,[a] had on its west side low down a house place called the Slaughter-house (81), held by the heirs of Henry Poole, and just beyond this were situated four almshouses (82), held by the Trinity wardens of Our Lady church. Next to this street came Langham Street, now Rue St. Denis, and then Larden Street, now called Rue de la Rivière from its having the river from Guînes passing along it. A small lane called Biggin or Bingham Lane also led out of Milgate Street, southwards between Langham and Larden Streets. There seem to have been no houses of note hereabouts, but on the east of Larden Street, or Landover Street as it is sometimes called, was the church and churchyard of St. Mary (83), or Our Lady, the existing parish church of Calais.[b]

South of the churchyard John Aster held a mansion and void ground called the Myddel Stewe (84); while a little east of this the Trinity wardens and Alice

*Pittoresque Voyage en Picardie*, which Calton calls "a paraphrase" of the building. In the courtyard some square-headed windows still remain.

[a] Now Rue St. Michel.

[b] The church of St. Mary or Our Lady is a building of the thirteenth century, with additions in the fifteenth and sixteenth, and a lady chapel in the shape of the vesica erected in 1631. The total length is about 286 feet with a breadth of 188 feet. The church consists of a nave about 95 feet long by 78 feet broad, with two aisles separated from it by five pairs of columns alternately circular and prismatic in section. The steeple, 191 feet in height, has always been a prominent landmark and is very frequently noted in the survey. There is an English Perpendicular window in the north aisle. A very incorrect view of it is given in the *Gentleman's Magazine* for 1814, and in the volumes for the years 1814 and 1816 are various notes about it and the town.

In this church "false, fleeting, perjured Clarence" married, in 1462, the daughter of the kingmaker. In 1533, John Bourchier, Lord Berners, the translator of Froissart, was buried there, and many other Englishmen were interred in the church during our occupation. Afterwards, in 1583, the burials were restricted in number by the fees being increased. In 1633 the large cistern or reservoir abutting on the church was built.

La Belle Anglaise, the great bell of the church cast in 1462 at the cost of —— Flambe, was in 1710 recast, but was eventually broken up at the beginning of the Revolution, 1792. The wardens of the Trinity table* of this church held many sites in the town and the Scunnage. The churchyard was utilised in 1722 for the erection of barracks.

* This body, the Brotherhood of the Holy Trinity and the Virgin Mary, in the parish church of St. Mary, was founded by patent 30 Edward IV.

In 1556 it is noted that the total rents of obit lands, church lands, and brotherhood lands in Calais and the Pale, all of which land had been taken into the hands of the crown, amounted to 25*l.* 13*s.* 8½*d.*

Clarke held "five tenements and gardens, now part of the Gramer Scole" (85). Stewes Street, now Rue du Presbytère, was the eastern bound of the churchyard and schools, and the next two blocks, separated by unnamed lanes, are of no interest except that the eastern one was taken for the erection of works to strengthen Develyn Tower.

It seems certain that there was at one time a fountain or conduit in the market place, but no signs of it remain.[a] The two small blocks on the south side of the market were the Hall of the Mayor and Fellowship of the Staple of Calais (86), now the site of the Hôtel de Ville,[b] and east of it the town hall (87), held by the mayor and aldermen of Calais. Of this building, the western part above was where they held their courts, beneath was a weigh-house and store-house occupied by the "Treasurer of Calais with the king's stuff and treasure in charge." The upper part of the eastern end, consisting of "2 great sellers" (*sic*) called gardeners, was held by the mayor and fellowship of the staple, who also held the lower part on the south side as a weigh-house for wool. Below, on the northern side, was the council chamber of the lord deputy. The chamber of London also held two houses called the Butcheries on the south side. Further east Margaret Baynham held a place between the council chamber and the wool pavement in tenure of Leonard Snowdon, alias Holland.[c]

[a] The Terrier of Miraulmont, c. 1580, mentions four small shops between the pillars of the fountain in the market place.

[b] The modern Hôtel de Ville has at its west end the belfry originally erected in 1609 by Claude Monet, the mayor. The whole building was reconstructed in 1740, and the cupola again repaired in 1771. In 1821 the clock and carillon were renewed. Just above the clock-face are two gilt jacks in form of jousting knights, who retire and advance striking each other's shield at each stroke of the clock. Their date is not known, and Coney's drawing, circa 1840, does not show them, but they are said to be of the seventeenth century, and to commemorate the Field of the Cloth of Gold. The clock strikes at, and five minutes after, each hour, and at each hour a bell in the Tour du Guet is also struck by hand. This, which used to be the signal for the curfew, cleansing of the streets, etc., is now only used at the hours.

[c] The present place occupies the exact site of the old market place, where the watches used to assemble in the English days. There was at one time a fountain or conduit there, and in 1515 Sir Richard Wingfield refers to the necessity for such in his correspondence with Wolsey. When in 1818 the pavement in front of the Hotel de Ville was laid down it was found necessary to stop up and close a well which from time immemorial had existed about a yard from the walls of the town hall. This was one of the few wells in the town; the chief sources of supply for water were the cisterns erected in 1691 by M. de Laubanie, close to the church of Notre Dame, and others, and the river of Guînes. A cross which was erected on the place d'armes in 1643, was destroyed in 1765,

FIG. 5. BIRD'S-EYE VIEW OF PART OF THE WHARF OF CALAIS *temp.* HENRY VIII.

(From Cott. MS. Aug. I. ii. 57*b*.) Taken from about the site of the Beauchamp Tower, where the modern lighthouse stands.

The Tour du Guet above the town hall is not mentioned in the survey.[a]

The "Fauxboroughs" of Calais, on the north side, began on the east of the pier in front of the Watergate. There was here in 1487 "outside the Watergate, beside Paradise, a free chapel of St. Clement," which in that year was granted "for life in the way of charity" to Frere William Mason. There is also mentioned in the survey a crane in the Paradise near the town wall held by J. Banester. At the end of the pier was the Searchers' Tower (89), seen in the Cottonian view and plan. This marked the eastern end of the West Haven, and on it were the following holdings. At the outer end William Tirrey held the Olde Searcher's House. South of this John Malyn held the Ferry and Ferry house. Next to this was the official residence of the Water Bailiff, and next to the wharf stood the King's Ward house. East of the pier was the dock or inlet seen in the *Cottonian MS.* which had to its east the wharf of Paradise; a small lane from the wharf to the Herring market, which lay south of the wharf, separated both from Adrian Pryseley's holding.

East of this "the mayor and fellowship of the merchants of the staple of Calais held by patent of the king as feoffees to the twelve sisters of the order of St. Elizabeth," a similar strip of ground with dwelling-houses thereon. This piece of land did not reach to the wharf, for Pryseley held another piece along the wharf adjoining to his own, and having the mayor's, or, as it is called, the king's ground, as well as a piece held by Anthony Bardesley, on which stood the Three Kings, between it and the highway.

East of Bardesley's holding was a plot of land, on which were the Roose,

and in 1751 a well was attempted to be sunk opposite the Hôtel de Ville but without success. Again, in 1842 an artesian well was begun in the south-east part of the place called now the Marché aux herbes, this also failed. Executions took place on the market place, part of which from the name of the site of the Staple Hall, the Pillory Haven granted to that body by Richard II. in 1389, was evidently the scene of minor punishments also. Turpyn mentions the pillory in the market places under the year 1538. In 1540, "Ser William Peterson, prist late commissary of Calais and the marches, and Ser William Richardson, late maior's preste," who had been tried at the Guildhall, London, on charges as to the Pope's supremacy, were hanged. As late as 1820 a coiner was guillotined in this place.

[a] It was repaired in 1606, having been much damaged by an earthquake in 1580, which caused the fall of one half of it. It was again repaired and ornamented in 1811, and in 1818 the light was established on its summit till 1849, when the present lighthouse was finished. The hall, where the public scales were, was burnt by accident in 1658.

the George,[a] and many other tenements, and a piece of ground called the Old Carpentry. These, which were all held by the same Pryseley, stretched along the wharf, having the highway on the south.

Eastward was more land called the King's Ground, and between part of this and the highway the mayor and fellowship of the Staple held a plot of land 120 feet square, on which Robert Clare had a houseplace. East, again, the mayor, constables and fellowship of the merchants of the Staple of Calais held of the king by patent as feoffees to the sisters a houseplace sometime called the Hermitage, and now the Suster House, served by twelve sisters of the order of St. Elizabeth.[b] This ground was 300 feet from east to west, and 160 from north to south. The sisters had the King's Ground on the north, and the highway and a small holding of Thomas Tutchet on the south.

The Suster House it is stated in the survey was founded for Hospitalitie of poor souldiers, and appears to have been continued in use as a hospital long after the French returned.

Though described in the survey as just by the Lantern Gate, the bird's eye view of the wharf (Plate XXVII.) and the view from the sea both show it further east, in fact, the lofty tower was opposite the block of buildings between Larden and Pickering Streets. The next buildings east of the Suster House were opposite the end of Larden Street. The turnpike (90) stood at the east end of the Suster House and is well shown in the bird's-eye view. It was also the eastern bound of Tutchet's small holding.

[a] The George Inn without the walls is mentioned in 1527 as a place where travellers, arriving after the gates were closed, stayed till the morning.

[b] Now the Whyte Harte.

[c] According to Demotier some Dominican nuns received permission from Mary in 1553 to come from Therouenne and settle in Calais under the protection of the Archbishop of Canterbury. These were either the sisters of St. Dominic mentioned by Lord Lisle in his letter to Cromwell (see Ellis's letters, iii. s. vol. ii.) or else a fresh lot who took advantage of the change of religion on Mary's accession. Lord Lisle mentions that the sisters, most of whom were strangers, "desire to depart, because they will not be obedient to the King's Acte." An inventory of their goods was ordered to be made, and they were forbidden to depart till permission should be granted. The sisters of 1556 it appears were allowed to remain after the conquest by the French, and perhaps the fact of being strangers was the cause. In 1620 they were formally settled and established by the magistrates under their superior Jane Delanoy, who died the same year, aged 105. A namesake of hers, John Delanoy, held a tenement and cellar fronting on the Market Place in 1556. These sisters, under the name of Hospitallers, looked after the poor, receiving a subvention of eight sous a day for each patient, and in 1642 were established at the west end of the present Rue de la Cloche.

The block of buildings east of the Suster House was 300 feet by 200 feet, and was held by the mayor, etc. of the Staple. John Hopkins held a space 70 by 70 feet east of this. Next to this Walter Rowland and Mighell Fychell held house-places, and still further on Peter Mighell held land with a licence for a windmill, as also had John Tuck. After these mills came the warren of conies of the Downs and Scunnage.[a]

*Cott. MS.* Aug. I. ii. 57 *b.* gives a very interesting bird's-eye view of part of the wharf of the town, a portion of which is shown in Plate XXVII. The arrangement of the houses with their gardens, void grounds, etc., in blocks or quadrants is very well shown. It will be seen that there is a palisading on the outside of the ditch of the town as far west as about the end of Pickering Street, where the fence turns at right angles across the wharf, enclosing various buildings, one of which has a steeple. Where the roadway passes the palisading ceases, and a turnpike is shown which is seen to be a section of the palisading pivoting on a post in the centre of the road, so that a double passage may be made when open. For convenience, there is a small gate or door at the side, so that when the turnpike was closed guards or others might pass in or out.

These turnpikes existed in many places in the Pale, and the names Planche tournoire along Guînes River, Ferme Tournant on the Sandgate road, and many similar names mark the sites of the old gates. In the account of the Duke of Guise's attack on Calais it is mentioned that holes were made through the turnpikes by the English in order to be able by musketry to dislodge the French who had sheltered themselves outside the turnpikes. This would imply that the palisading was not furnished with salients for flank defence, nor could it be seen through.

[a] The modern Courgain, north of the turnpike on the wharf, is not mentioned in the survey, and the origin and meaning of its name are still doubtful. In the early days of the French conquest the site was surrounded by palisades, within which lived the fisher-folk. In 1623 a wall was built, and four years later regular streets arose, but it was not till 1853 that the church was built.

According to M. Demotier, documents at Lille prove the erection in 1444 of the first jetty. In 1533, when large works were carried on for the improvement and defence of Calais, a west pier was built, and in the survey of 1556 the two jetties east and west are often mentioned. Like the other works on the sea-front, these often suffered from storm, and the charges for repairs occur very frequently in the accounts. In 1687 new wooden piers were built and prolonged in 1700, and have since been often improved.

As the name implies, the chief lighthouse of Calais was at the Lantern Gate, and this was thought sufficient until 1818, when a light was established in the top of the Tour du Guet, but was done away with in 1845, when the present handsome lighthouse was erected on what was the site of the old Beauchamp Tower.

To give some idea of the state of the town in 1556 it may be stated that besides the buildings noted there were about thirty almshouses, and about seventy-eight houses called "mansions" in the survey. Six brewhouses, above eight store houses, some eighty-one wool houses, and twenty-two herring-hangs or sales. The wardens of the Trinity tables of St. Nicholas and of Our Lady churches held respectively twenty-three and fifty-four tenements.[a]

This state of things looks prosperous, and it is difficult to realise the great change which in 1560 had come over the place when the Commissioners of the French King report that the whole town was in utter ruin.

In the Pale the gradual neglect of the English possessions may be seen in the fact that of the twenty-six clergy of the town and Pale in 1532 thirteen were absent, and of the rest, four livings were held by royal chaplains, one by the chamberlain's chaplain, and Mark, Guemp, Calkwell, and Nele had only one rector, John Bennolt, to look after them. Of the absentees were the rectors of St. Mary's and St. Peter's, whilst St. Nicholas was vacant.

Of the appearance of Calais in English times there are a few examples. The illumination in Froissart of the siege of the town is quite conventional, but in Rouse's *Life of Richard Earl of Warwick*, c. 1487 (*Cott. MS.* Julius E. IV.) printed in vol. ii. of Strutt's *Horda*, is a sketch at Plate LIV. showing the fighting in 1436, when the Duke of Burgundy attacked the town. The background shows Calais from the land side, and was evidently founded on some very rough sketch of the place supplied to the artist. This is the earliest view to which any value can be attached. In the *Cottonian MS.* Aug. I, ii. are several views and plans of Calais and the Pale executed *temp.* Henry VIII. Of these No. 57 is a plot of the town and part of the Pale. The sketch of the town is small but distinct. No. 57b is a beautiful pen and ink drawing of the wharf, Risbank, etc., a bird's-eye view (see Plate XXVII.). The ships are exquisitely drawn, and the blocks of houses, though conventional, give an excellent idea of the arrangement of a town about 1540. No. 70, a view of Calais from the sea, is very good, and has with No. 71, a plot of the town and Pale, been engraved in the Camden Society's *Chronicle of Calais*. No. 51 is a general plan of Guînes Castle. No. 52, a highly coloured plan and view of Guînes, is full of interesting detail. No. 23, a plan of the town and part of the castle of Guînes, has been published in the Camden Society's *Life of Lord Grey of Wilton*. It will be observed that in the views of Calais very many tiled roofs are shown (though in the survey many thatched cottages are mentioned), in

[a] According to Ferres, at the surrender 4,200 persons passed out of the town.

accordance with the order in 1413 that all houses were to be roofed *tegulis vel sclatis*. Another valuable view to be consulted is the Field of Cloth of Gold at Hampton Court, where Guînes Castle is seen in a much distorted view in the foreground, whilst Hammes Castle appears in the midst of the inundated low lands, and Calais with its towers stands out on the horizon.[a]

The view of the west end of Calais in the Cowdray pictures is intelligent, but the castle is treated very conventionally. The Italian engraving of the capture of Calais published in 1558 is more of a plan than a view.

The town of Calais enjoyed many privileges conferred on it by its English sovereigns, the first of whom, Edward III. confirmed the liberties and customs which he found then in force. Richard II. granted to the mayor the very special privileges of a sword and sword-bearer with maces and mace-bearers. The sword which the king gave in the first year of his reign was to be carried point upwards save in the presence of the king or the lord deputy. Succeeding sovereigns confirmed and added to the privileges of this town.

In 1535 Henry VIII. for various considerations obtained all the lands, etc., of the Staple except the Staple hall in the market place. This action was owing to the enormous debts incurred by that body, who appear in 1523 to have owed the king £2,300. It is not proposed, however, in this paper to give an account of the history or objects of the Staple of Calais.

Fig. 6. SEAL OF THE MAYOR OF CALAIS. ½

It has been generally stated by French writers that Edward III. changed the ancient arms of Calais, St. Bertin in a boat, to a portcullis, as signifying that the town was a gate into France. Of course, this is absurd, the portcullis being merely the Beaufort badge, which later on, was here, as elsewhere, placed on royal buildings, etc. The seal of the mayor of Calais, however, gives us the arms and presents them in a curious way. This seal, about two inches in diameter, bears within the legend:

✱ SIGILLVM : MAIORA | TVS : VILLÆ : DE : CALAIS

[a] The artist, in his desire to show as much as possible, has put the Catt of the south face close to the gateway on the north-east corner.

There are also sketchy views of Calais, etc., in the tapestries at Madrid illustrating the exploits of the archduke Albert when the Spaniards overran the country in 1597.

a boar passant, fastened to whose neck is a cloak flying up in the air. On this cloak are the arms: *Barry undée, a lion rampant.*[a] The boar is here a pretty example of a supporter, and a parallel instance of such a cloak may be seen in the half-florin of Edward III., which bears a crowned leopard sejant, with a cloak round his neck charged with the arms of France and England quarterly.[b] Another example is seen in an illumination in Froissart, showing Charles le Bel receiving the English queen Isabel. The king's dog wears such a cloak, but *semée* of fleurs de lys. The charge on the Calais arms is of course an English lion, while the *Barry undée* is found on the shield of arms of most merchants adventurers as typical of the sea. The boar's presence is accounted for thus: Laurence Minot in his cotemporary poem on the achievements of Edward III. quotes a prophecy of Merlyn as to a boar which should trouble various countries. Minot sees in the boar the king and refers to him often in such terms. Other poems of the time also associate Edward with this animal, as may be seen in Wright's political poems.

Fig. 7. SEAL OF THE STAPLE OF CALAIS. 1/1

The staple of Calais adopted a variation of these arms, as shown in the seal of the Staple, which bears a shield, *Barry undée, on a chief, a lion of England.* The legend is Sigillū : teſtimoniale : ſtapule : caleſie :

The seal of the king as lord of Calais bears on the obverse, which is $3\frac{3}{4}$ inches in diameter, the king riding on horseback to the sinister on a field *semée* of roses. His surcoat, shield, and trappes bear the royal arms, France and England, quarterly. The legend when complete reads:

Sigillum : Edwardi : dei : gracia : regis : anglie : et (long floral spray) : francie : & : dni : hibernie.

On the reverse, which is only $1\frac{3}{4}$ inch in diameter, is a triple-towered gateway with a rose beneath a portcullis and two others slipped and leaved above the battlements. The legend is the same as on the obverse.

[a] M. Demay, who engraves this seal in his *Inventaire des Sceaux de l'Artois et de la Picardie*, No. 1,036, describes the boar as *cravatté*, and the cloak as *vaire au lion.*

[b] I am indebted to our President, Dr. Evans, for this contemporary instance.

This seal was in use from the time of Edward III. to that of Henry VIII., and perhaps even later, and the legend has at various times been much altered. Impressions exist in the British Museum and in the Public Record Office.

In *Stowe MS.* 289, entitled *Aspilogia*, Thomas Astle gives at fig. 626:

"The seal of King Edward the 3d which he used as King of France within the district of Calais appendant to a deed in the possession of Thos. Astle Esq. (now L.C.F. viii. 1).

It is observable that in the legend round the seal the king is stiled King of France and England . . . Upon the shield are the arms of England and France impaled, but upon the caparisons of the horse the arms of France are quartered before those of England . . Upon the reverse is the gate of Calais.

N.B. This seal is not engraved by Sandford and is supposed to be unique."

This seal bears the inscription: ꝺEDWARDI : DEI : GRATIA : REX : FRANCIE : ET : ANGLIE. On the reverse is the counter-seal, about $1\frac{1}{2}$ inch in diameter, in which is shown a triple-tower and gateway with portcullis. The tops of the towers are crenellated. The field is *semée* of quatre-foils. The legend is: ✠ S. PˢVISU' · P · T'RIS · ET · IN . PTIBꝫ · CALESIE. The document to which this seal is attached is a grant of a messuage, etc., in Calais from the king to W. Baudell, dated 26 March, 24 Edward III.

The Scunnage, Scabinage or Eschevinage of the English time, is now represented by the commune of St. Pierre[a] and part of Sangatte. The old limits of the Scunnage were on the west at the sea-coast some 1,160 rods from Risbank Tower. From this point a dyke ran south-south-east to a spot on the bank of the river where three stakes were planted. The river called the Flowe branched off from the river to Hammes, and at the seaside end of the dike was the Hoke, the ancient place of execution of the lordship of Sandgate. Thence ran another dyke parting the Scunnage and the county of Guînes as far as the Plash. From the Plash ran the Ware, also called the New Arts, separating the Scunnage from Colham parish as far as the crossway from Colham church, where the Delph or Elf way continued the line of partition to the house of Hugh Concil, bailiff of Colham. At this point (just below Les Hautes Champs of the modern map) started Cranebrook Street, north-west to where the Green Bank from the north parted Mark from the Scunnage. The Green Bank ran from this point to the sea-coast about 1,216 rods east of the East Jetty. The land for about 330 rods west of this point was called Newland. According to the survey the Scun-

[a] The ancient names of this part, Petresse, Peturnesse, and Petrenesse (charters of St. Bertin), referred to the stony bank extending from Newhaven Bridge to Mark, some 870 rods.

nage consisted of 5,502 acres, not inclusive of the town and "faux boroughs," and was divided into the following plots: A plot of 305 acres stretched from Mark to the Park of Calais, and had for its southern limit the Hollet, which has since been canalized. In this plot against Mark lay the common of Calais, about 148 acres of which were held as livery lands by the ordinary soldiers of the garrison. South of the common and against Mark the Lieutenant of Calais Castle held 45 acres, his livery lands. On the soldiers' livery lands stood the Waterhouse shown in the Cottonian map. The plot south of this was a large one of 1385 acres, in which the chief officials of Calais held their livery lands. The plot reached south as far as the great old river, and west to the new river.

The Lord-lieutenant held in detached portions about 220 acres as livery lands. These lay generally south of the More Dyke or North Watergang. East of some of them, and between the Heath and the Little Common, the Lord Deputy held his livery of sixty acres. The High Marshal's livery lands of 120 acres lay between the More Dyke and the highway, having to the west the lands of the Under-Marshal, but no quantity is mentioned. The Comptroller's land, some twenty-five acres, was south of the highway. The sixty acres of the Treasurer abutted on Mark, and were south of the Hollet. The Heath, of which 360 acres were let to the parish of St. Peters, while an equal number were unlet, abutted on Mark. The Little Common of St. Peters, of nineteen acres, was south of the lord deputy's land. The Great Common extended also into this plot, and the soldiers of the garrison held ninety-eight acres lying south of the town ditches and the Lead. At the east end of their land was the Waterhouse (shown in the Cottonian map), which stood in their land in the plot of 305 acres. St. Peter's church (by the bridge) and the Parsonage were also in this plot; and at the other end of it, Widow Marshall held ten acres of pasture called the Rosebush, and other lands north of the heath and abutting on Mark. West of her, Sir Maurice Denys held, besides other lands, twenty-nine acres at a rent of 30*s.* 9*d.* and a gilt spur value 3*s.* 9*d.* Francis Wilford held some twenty-six acres, portions of Grampnull's pasture between the Hollet and the highway. A windmill south of the highway was held by Robert Whethill. South of this plot, and abutting on Mark on two sides, was one of 780 acres, in which Hugh Concill, the bailiff of Colham, held 100 acres, fifty-two of which between the Old River and Crane Street, also called Piers Watergang, were part of a pasture called Winklyne and Chantrey. Griffith Appenrith held twenty-one acres south of the river, and once part of the North and South Brook.

To the south of the town and sea beach was a large plot of 1,145 acres, which,

with the last and the next one of ninety-five acres, includes a large portion of the modern manufacturing town of St. Pierre. These 1,145 acres extended from the New River to Newenham bridge, having the Old River as its southern limit. In it J. Lymbroke held the Mare, of fifteen acres, near to St. Peter's church, and Richard Sacville had twenty-five acres, called the Hopfield. George Trappes[a] had four acres abutting on the New River and the Old River, "paying yearly as parcel of 12*s.* 9*d.* and a speare hedles at 9*d.*"

Many cases are mentioned in this plot of land given "in recompense for land taken for the fortifications of Newenham bridge."

West of Guînes River was a plot of ninety-five acres, in which were some of the lands held by the Maisondieu, or hospital of Calais; and J. Thomas held thirty-six acres, part of Winklyne and Chantrey, already mentioned as an old pasture that occupied part of the plot of 780 acres. Other portions of this pasture were held by Sir Maurice Denys.

West of this plot, and between the Old River on the north and the New Arts on the south, was a plot of 243 acres reaching to Calkwell, from which the parish of St. Peter's was separated by the Old River. No holdings of interest are noted in the survey. The next two plots lay beyond the Newenham Bridge, in what is now the parish of Sangatte. The first, of 205 acres, was divided from the other of 351 acres by the Flowe running from the Havon toward Sandgate. No holdings of note are mentioned in this plot. The second one, which was a salt marsh, "overflowed at every tide," called Dykeland, was held by Sir Maurice Denys. North of it were the West Downs and conigree held by the captain of Guînes as far as a point called French Gapp, 455 rods west of Risbane, where the downs and conigree were claimed by the captain of that fort as far as a point seventy rods east. The Scunnage contained 4,509 acres with a rent of 110*l.* 8*s.* 7¼*d.*

The perambulation of the Pale in the survey speaks of the dyke parting the Scunnage from Dykeland; but there must be some confusion, as the latter was included in the Scunnage, and the dyke parted that district from the county of Guînes. After the French conquest the limits of the commune representing the Scunnage were determined by firing a cannon loaded with one-half French powder the other half English, and where the shot fell was made the boundary.

The church of St. Pierre is now built up in a large hospital. It was in this old church, a building of the thirteenth or fourteenth century according to various authorities, that in 1500 Henry VII. met the Archduke Philip (father of Charles V.).

[a] A London goldsmith.

Great festivities were held in the building, which was richly decorated with tapestries, etc. In 1532 we are told that the rector Dominico de Corsis was reported to be dead, and had not been there for thirty years. The French Commissioners, in December 1558, speak of the ruins of the said church; and the building of later times only dated from 1608.

The town of St. Pierre was separated from Calais in 1790.

For the tolls of the Scunnage, see Appendix III.

Andren, or Outingen, occupied much the same ground as its modern representative Andres. It lay north of the Boar Way, parting it from Campe, east of Spillac, from which the Morrell Way and part of the common street divided it. Eastward it touched Ballangen, and northward it extended to the great stream from Ardres. In the survey its extent is given as 1,163 acres, with a total rent of 48*l.* 18*s.* 3¼*d.*, and it is divided into the following plots: Stretching across the parish, and parted from Campe by the Boar Way, was a plot of 165 acres, reaching to the Ewlin Way, which divided it from another of 215 acres south of the way from Guines to Andren village. North of this, and touching Ballangen on the east, was a plot of 350 acres, having on its west the common street leading to Clayes Wood (the Clairsous of the modern map) and to the common. West of this way was another plot of 153 acres, south of Clayes Wood. In the north-east of the parish, and abutting north on the great stream from Ardres, was a plot of 200 acres called the marsh or common of Andren, mostly under water. West of the common, and between the great stream and the common street, was a plot of seventy acres, in which was Clayes Wood at its southern end. The common street compassed this plot on the north and west, and then made a bend, enclosing a small plot of ten acres between it and the great stream. East of Clayes Wood the Clayshot of the Cottonian map stood, anciently the abbey of Andren, the site of which is shown on M. Pigault l'Espinoy's map. It was probably near where Le Banc du Loup is marked on the modern map. Thomas Stone held half a house place in Clayes Wood and half another place "by the abbey." J. Pounde also held land abutting east on the way to Ballangen and north on Abbey Hill. Andren Bulwark, though shown in the Cottonian map and in M. Pigault l'Espinoy's map as on the great river, is not mentioned in the survey. It was probably north of Clayes Wood. The abbey was destroyed by the English in 1347, when the monks retired to Ardres pending the re-establishment of the place. It was again destroyed in 1544. A Hollow Lane is mentioned as running from the Ewlin Way to the common. John Sybrande held a part of the Bredest, of which Thomas Franks held the remainder, but the place has not been identified.

Ballangen, now Balinghem, the nearest part of the English Pale to the French fortress of Ardres, has not much changed its limits. It lay east of Andren and Camp, and south of Jones' Bulwark, having three-fifths of its borders on the Pale. In the survey it is sometimes called Bavelinghem, a name that occurs in charters as early as 1034, but the shorter form, Balinghem, appears as early as 1178. The parish of 850 acres was divided into the following plots: At the south end a small triangle of 28 acres touched Camp, and reached north as far as the Boar Way, above which another one of 80 acres lay south of the Ewlin Way. Between the Ewlin Way and the road from Guînes to Ardres passing by Andren were two plots the western one of 90 acres and the eastern one of 210 acres. These were separated by a way from Camp to Ballangen and a place called in the survey Martin Catchore; what this was it is difficult to say, no tenant of the name appears in the list in the survey, nor does any modern or ancient map give any information. North of these two plots were two others of 230 and 212 acres lying west and east of the same way, and bounded on the north by the commons of Ballangen and Brêmes. Of Ballangen waste or common, the survey gives no details as to size, but it states that it had on the west the Black Ditch, Whethill's Plash, by the Abbot's Meads, and lastly Jones' Bulwark, from which a stream to Ardres Plash formed the north limit; Ardres Plash and a stream from Brêmes Common bounding it on the east. The castle, of which there are no remains nor indication of the site, was taken by the English in 1354, re-taken in 1377, and again seized by the English in 1412. In 1436 the village was burnt by the duke of Burgundy's troops on their way home after the unsuccessful attack on Calais.

The Chester herald of the period of the survey held some 88 acres in the parish and Nicholas Worsley had on the Black Ditch a house place and land called the Havon House. Near to Andren Common William Masters held a mansion called Peerles Place with 26 acres. The total rent of the parish was 67*l.* 0*s.* 6¼*d.*

It is said that the congress for the establishment of peace between Henry VIII. and Francis I. met here.

Bonninges, which has preserved its name unchanged from at least 1153, when "altare de Bonninges" occurs in a charter of St. Bertin, was situated, as now, south-east of Pepling, south-west of Froyton, north-west of Pitham and a small portion of St. Fricat, and north-east of Hervelingen and Sandingfield. In the survey its extent is given as 2,143 acres with a rental of 60*l.* 16*s.* 8¼*d.* If the general limits of this parish have not changed much since the English occupation,

the chief roads have in many cases been since then laid out somewhat differently to what we find in the survey. According to that description it was divided into the following plots: Commencing at the western corner a plot of 585 acres extending eastward to a way to Calkwell, had on its south another of 380 acres reaching east to the same road. South of this was a small plot of 50 acres extending eastward to the road from Pitham to Bonninges, and touching on the south-east another small plot of 77 acres which abutted south on Pitham parish. North-east of this and just south of the village of Bonninges was another plot of 66 acres. The eastern portion of the parish was divided into three plots abutting east on Froyton parish and containing respectively from south to north 263, 382, and 340 acres. The first two of these were parted by the way from Sandingfield through Bonninges village to Froyton village. The two last by a way from Bonninges village to Calkwell. In the last plot Richard Whethill held 108 acres and the heirs of Nicholas Whethill held some 150 acres and a mansion called Crewater. In the same plot John Hounde held 16 acres called Hardingcamp in the northern corner of the parish. In the survey the eastern or north-eastern boundary of the parish is said to be the Ewlin Way and a way with a cross. This cross stood at the junction of the parishes of Bonninges, Froyton and St. Tricaise. On the north-west boundary at the north end the four parishes of Bonninges, Pepling, Calkwell, and Froyton met, while at the south end Scales, Hervelinghem, and Bonninges met at the point. In this parish the farm of l'Anglaise recalls the English occupation but the farm of 1566 has not been identified in the survey. The farm of le Buisson however takes its name from "a bush or shrub with a cross and hand thereon," which was on the way from Wadingthum in Pitham, now Wadenthum, forming the south-west bound of the parish.

Buccard, or Bokernes, exists no longer as a separate parish but its name survives in the parish of Hames Boucres, which now includes the two English parishes. Buccard consisted of two pieces of land, the smaller and more westerly portion being a strip which ran from the village of Stone on the borders of Pitham in a north-westerly direction between St. Tricat and Hammeswell to about where the Ewlin Way crossed those parishes. The eastern portion lay between Pitham and Hammeswell on the west and Mellac, from which the way to Fynes parted it on the east, the Pale forming its northern and southern limits. The extent of this portion was 1,051 acres and the rent of both amounted to 42*l.* 0*s.* 2¼*d.*. The parish was in both parts traversed by the Ewlin Way, and the eastern or larger part was also crossed by Guines Way, the Boar Way, and Fines Way, the last forming its eastern limit near the Pale.

Adrian Spryte, who held 179 acres in the north of the parish, also held a pasture called Bush. Sir William Perton held Buccard Windmill, but neither of these sites are shown on the map.[a] Hopyards are mentioned as occurring in the parish, which contained 1,051 acres.

In the survey Buccard is divided into various plots as follows: Commencing at the Pale and running along the borders of St. Tricat and Hammes was a strip of 41 acres quite detached from the rest of the parish.[b] Again beginning at the Pale and extending northward as far as the way to Fines was a plot of 168 acres. North of this a plot of 580 acres reached as far as the Ewlin Way. Between this and the Guînes Way was a smaller one of 130 acres and yet northward between this last and the parish of Hammeswell was a plot of 80 acres. The Boar Way traversed the plot of 580 acres in an easterly direction, while the Hollow Lane ran north and south approximately joining and crossing the Ewlin Way and Fynes Way.

In the north of the parish was a place called the Grene Common or Little Grene, where there was a bridge over the stream which branched off from the Goyle.

Calkwell, now Coquelles, has changed in extent more than most of the parishes of the Pale. This is owing much to the disappearance on the map of the large plashes or sheets of water that, with numerous creeks and a small main stream, made up the river which, starting from the Guînes river above that town, passed through the marsh land near Hammes Castle, the eastern portions of St. Tricaise, Nele, and Frethun, the large plash of Calkwell, and eventually running through the sluices of the fort at Newenham Bridge, entered the prolongation of the Haven of Calais a little south of another stream, the Flowe, which extended towards Sandgate. From this main stream flowed other streams or creeks such as Cheritree Creek, Arbenweavers Creek, Bowker's Creek, Ruskede Creek, Locker's Creek, all in Calkwell. Cleneclakers Creek or Quellmouth parted Froyton from the parishes of Calkwell and Boderick. In this creek or plash was the Lodge. In Froyton parish were Le Tubbe Creek and Little Bridge Creek, and in Nele was St. Margaret's Creek, while in St. Tricaise were the Kyve Hoke and others not specially named. The Goyle parted the Scunnage from the county of Guines and reached from the borders of Calkwell plash to the river which went toward Sandgate. Modern draining has obliterated most of the above creeks, etc. and the

[a] The mill no longer exists.

[b] At the south of this strip was the village of Stone, now called *la Pierre.*

only traces of them are in the survey where their position is recorded in not very distinct terms.

The parish of Calkwell then was bounded on the west by Sandgate and Pepling, on the south it touched Bonninges for a short distance, and on the south-east it abutted on Froyton up to the bank of the Plash. On the north-east it was limited by the Plash and at Newenham Bridge it met the Scunnage. Included in Calkwell parish was an older parish called Boderick which was the portion of the whole parish lying next to Froyton. There were also in earlier times two other parishes called Newenham Bridge and Milman Brook, but these are only casually referred to in the survey. They were situated really in the marsh land between Colham and Calkwell, Milman Brook[a] being separated from the West Main Brook by the Scales Dike, and Newenham Bridge of 500 acres lay between the Scunnage and Milman Brook. The old village of Calkwell, though in the English days an important place, fell after the changes of 1558 into decay and the ruins of the church alone mark its site, the French inhabitants having made the village of La Chaussée, in Sangatte, their home. Near the old church are the remains of a fort built by Guilbert of Frethun, who unsuccessfully opposed Henry V.

In the survey the parish was divided into the following plots: 339 acres north of the New River, and between the Plash on the east and the road from Calkwell to Newenham Bridge on the west. South of this plot was one of 815 acres having on its east the river from Hammes to Newenham Bridge, *i.e.*, beyond the Plash, and on its west the road from Guînes to the bridge. West of this, and like it bounded on the south by Froyton, were 318 acres reaching west to the Boulogne Way. The Plash of Calkwell, called also Whethill's Fishery, lay south of the Old Goyle or river from Hammes Castle to the bridge, and was 40 acres in extent. Another plot of 940 acres, sometimes called Newenham Bridge parish, lay south and west of the Scunnage and east of the Plash, and another plot called Milman Brook or the West Marsh had the Scunnage on its north and east but the Old River on its west.

Peter Evered held a place called Cales Hooke between the fishery and a way called the Drewer. In the west of the parish a way to the chalkpits on the borders of Sandgate and Pepling is mentioned under the name of Branskate. The spot called Brand's Gapp may be another reading of this name. The name Calkwell occurs in a charter of Bishop Milo, of 1145 or 1147, where "altare de Qual-

[a] 440 acres.

quella" is mentioned, but, as has been noted elsewhere, it is not in the Treaty of Bretigny, as suggested by some French writers. In the *Chronicle of Andres* of the twelfth century Boderick is called Budreke. In the survey the whole extent of the parish is given as 2,452 acres, including the sub-divisions of Boderick, Newenham Bridge Parish, and Milman Brook. The rent of Calkwell, including the first of these, was 52*l.* 18*s.* 3¼*d.*, and that of Milman Brook, 48*l.* 3*s.* 1¼*d.* Martyn's Hoke of about 120 acres was held by J. Johnson and the Trinity table of St. Nicholas church in Calais, but its position has not been identified. In the southern part of the parish William de Master held 5 acres, called Bedlem, abutting on the Ewlin Way, and in Boderick Joice Dulle held the Oxe pasture of 103 acres abutting on the fishery. A farm called the Causey and Calkwell Waste were held by Robert Whethill, who also held the Red Chamber, one of three house-places called Mustertons, with a conigree, in all 13 acres abutting on his land in Froyton. When the fortifications of Newenham Bridge were enlarged, *temp.* Henry VIII., many of the tenants of land in the vicinity had other lands given them. Amongst these were the heirs of R. Paradise, one of the family an early member of which probably was responsible for the place of that name on the north of the town. The New Bullen Way was no doubt the result of the addition to the defences and was more to the north-west than the Old Bullen Way.

Camp, now Campagne, though occupying part of the same position as in the English days, was then larger in extent, for it extended south-west to the English Pale over part of what is now Guînes Parish. In the survey the following plots are given: Commencing on the Pale, and reaching south-east to the street running through Camp village was the plot of 745 acres of woodland. In this and between Vinks Valley (separating the parish from Spellac) and the Nydeseaw, or, as it was also called, Bird's Nest Valley, were 221 acres called the Queen's Woods. These extended northward as far as the Rigalls in Spellac. Between Bird's Nest Valley and the Picardy Woods outside the Pale were 274 acres more of the Queen's Woods extending northward to the Cattery drises. This name occurs in M. Pigault l'Espinoy's map, but is not shown in modern maps. Sir R. Windebank held "a bush" called the Padolls, of 11¼ acres, and another of 16 acres, called Trane, both in this plot. The next plot was one of 610 acres of arable land extending northward to the way from Guînes to Camp village. In this plot was the church on the west side of the village street, which was called the Rue de France, and parted the two nationalities, the portion of the modern parish shown as Berck at no time forming part of the English Pale. In this plot, also, Richard

Gryme held one-third of the place called Cowfootes or Cowvotes, J. Reymes holding 23 acres of the same place, to the east of which was a lane to the woods. Between this plot and the parish of Andren, from which it was parted by the Bore or Bear Way, was a plot of 460 acres, in which a way called the Butter Way was situated, but which cannot be identified. It apparently ran eastward from the Morrel Way, which separated the parish from Spellac. J. Prowde and Leon Case held a house place called th'Abbey Hill, not identified. The survey gives the extent of the parish as 2,275 acres, with a rent of 47*l.* 10*s.* 4¼*d.* It was in this parish, and perhaps extending into Andren, that the site of the famous Field of the Cloth of Gold is said to have been. It is curious that in the survey, taken only thirty-six years after the event, there is absolutely no reference to the meeting. The site so shown on modern maps is certainly about midway between Guînes and Ardres, but the breadth of Ballangen parish intervenes between the supposed site and Ardres, and we are told that the camp was just within the Pale; and, again, the high road from Guînes to Ardres then and now was to the north of the Boar Way, on which the site is marked. Going along the road from Guînes to Ardres, at about 3½ kilometres from Guînes and 5½ from the latter place, a valley is crossed which runs from the south-south-west up to the windmill in Andren. If this is the Vallis Aurea, Henry was well within his own territory, and the two kings must have moved slowly to have required an hour and a half to do the distance. It would appear, also, that the name was given not alone for the splendid encampment, but was the actual name of the valley, perhaps due to its fertility.

Soardino, the Mantuan ambassador to France, mentions that the two mounds on which the English and French halted, about a bow-shot from each other, were raised expressly for this occasion.

This parish appears sometimes to have shared with Ballangen the services of one parson, for in 1537 it is noted that the individual so acting was just dead.

Colham, now Coulogne, was divided into two parts, of which the high land was called the Isle of Colham or Colne. This so-called island was in the northern part of the parish, and is still clearly noticeable. The boundary of Colham, according to the survey, was, on the north, the New Arts which parted it from the Scunnage as far as the street from Colham Castle to Colham Bridge. Thence the boundary ran along the Delph or Elf Way, which parted it from Mark and ended at Hugh Concill's house at the beginning of Cranebrooke Street. Its southern limit thence was the Sing Dike, as far as Calkwell, which formed its western boundary.

The parish was divided into two plots of 550 and 522 acres on the west and

east sides of the street, running north and south from Colham Bridge to the Sing Dike. Through the parish from west to east and commencing at the turnpike of Colham ran Colham Street, which, passing the church, separated Mark parish from Colham and then ran to Guemp Bridge.

The Green Hill of 26½ acres, held by George Rosham, as well as 125 acres of the North Mede, lay a little to the east of Guînes River. Nicholas Whethill's heirs held 106 acres at the west end of the parish west of Guînes River and south of the New Arts, which seems to have been another name for the Ware, or at least that part of it west of the spoye, by which it entered Guînes River. G. Blosham, also held 110 acres on the east of Guînes River and north of the Sing Dike. In the survey Skallis Dike is said to divide Colham from the Mainbroke, which would make it to be a sort of continuation of the Sing Dike. Sir Maurice Denys held 3 acres called the Mille Walle, north of Colham church-yard, and a place called Thermete, and a part of the North Mede. The survey gives the rent of the parish as 26*l.* 0*s.* 11*d.*

Collam occurs as Coloigne in the Treaty of Bretigny, and Edward IV. appointed William Worsley bailiff of the eschevinage of the parish. The fortress of Edward III's time on the north was razed in 1558, and the land was given to Maréchal de Thermes. It is on this site that the present church is built, but the old one was not far off. The North Street, or North Procession Street, appears to have run at right angles with the Cross Street.

Froyton, now Frethun parish, was situated in the south-east of Calkwell, north-east of Bonninges, north-west of Nele, and with Froyton Marsh extended to the river from Newenham Bridge. In extent it consisted of 1,626 acres, and nearly corresponded with the modern parish. It was crossed from north-west to south-east by the Ewlin Way (which formed part of its south-west boundary) the road from Calais to Guînes, and by a street called in its northern part Little Boderick Street and further on Mill Street. From north-east to south-west it was crossed by Bonninges Street or Common Street, so called from the two places between which it ran. Pape Street is also mentioned in the survey in the plots between the Ewlin Way and Guînes' Way. The parish was divided from Nele by Cokilian Street, which toward its northern end was called St. Margaret Street. Froyton Bulwark was at the intersection of the Common Street and the river, and it will be remembered that it was between this and Nele Bulwark that the Duke of Guise's forces broke into the inner part of the Pale on Jan. 2, 1558. The boundary of the parish north-west is mentioned as the way from Calkwell to

Harding Camp. No large holdings are mentioned in this parish, the total rents of which amounted to 54*l.* 14*s.* 6¾*d.*

The Marsh at the north-east extended as far as the Guînes river.

The Little Common lay in the north-east corner of the parish, and was 54 acres.

In the survey Froyton is divided into the following plots: Commencing at the south-west corner, and parted from Calkwell by the way from that place to Harding Camp, was a plot of 380 acres reaching north to the Ewlin Way and bounded on the south-east by the street to Bonninges from the Little Common near the Marsh. Next to this plot, and bordering on Calkwell and Boderick, were two plots of 42 and 405 acres, separated by Boderick Street. Beyond the last was the Little Common of 54 acres, which also abutted north-east on a plot of 330 acres lying between the Bonninges Street and Nele. A way from Froyton to Nele separated this from a small plot of 38 acres, bounded south-west by Guînes Way, which parted it from one of 220 acres extending south-west to Ewlin Way, between which and the parish of Bonning was a plot of 145 acres. A small triangular plot of 30 acres lay north of this plot, extending to where Ewlin Way ceased to divide the parish from Bonninges.

In the north of the parish west of the Plash and north of the New River was the Red Chamber, one of the three places called Mustertons, and held by Robert Whethill. The name of Red Chamber has now been changed back to what was probably the original one, Cambre, being, it is said, an old local name for a brewhouse.

Guemps, or Chempe, which retains its name, appears as Ganape in charters of St. Bertin of 826 and 1216. The limits of the parish do not seem to have changed. It had on its north the Havon, west the Hollet, now the Houlet, south the Polyvard, and east the parish of Holfkerk.

The extent of the parish was 2,790 acres, and the total rent 111*l.* 6*s.* 7½*d.* It was traversed by Middle Street, now Meer Street, Knight or Riddar Street, now Rue Serpentine, Guemps Street (from Guemps Bridge or Perkyn's Bridge), now Pont du Guemps), which passed through the village of that name; and other streets not identified, such as Brewring Street,[a] Cordam, Corderne, or Cristan Street. These are all mentioned in the survey. Skarre Street, which may be a mistake for Skane Street, separated the south of the parish from Holfkerk. At

[a] Brewring Street was in the north of the parish, running southward from the Haven.

the north-west corner of the parish, near Mark Town, were the two bridges, one of stone the other of wood. At the south-west corner where the Houlet crossed the Polyvard was Boots' Bulwark, where now on the map is marked the site of Fort Rouge. Not far from the Pont du Guemps was Boothackes, whence ran the great river of that name to the Mount, and so on to Ballangen or Jones' Bulwark. In M. Pigault l'Espinoy's map Bose Street is shown traversing the centre of the parish from the north down to near the village of Guemps.

Of the chief holdings in the parish Jane Prowde held 310 acres, called Portilberg, Portel Bridge, or Fowling Pool, but this has not been identified, nor has the Dopper Broke of 300 acres mentioned in the Edward IV. terrier.

The captain of Boots' Bulwark in 1556 was John Malen.

In the survey the parish was divided into three plots as follows: The first, of 1,078 acres, included the whole of Guemps north of Guemps Street except 80 acres in the south-eastern part of that portion of Guemps, and separated from the rest by Skarre Street, also called South Street, which ran south from the Chauntryne, and formed the eastern boundary of the parish in its southern portion. The third plot included the whole of the parish south of Guemps Street, and was 1632 acres in extent.

The chapel at Guemps was annexed to Mark, and its bell was the alarm-bell for the low country.

Guînes parish in the English days was but a portion of that which is now so called. It had on its west Mellac or St. Blaise, and on its east Spellac or St. Quentin, both of which parishes, or the greater part of them, are included in the modern parish of Guînes. The English pale formed the southern limit, and on the north was the Marsh. In the survey it is divided into plots, which may be described as follows: Commencing at the south-west corner, and separated from Mellac by the Buckway from Fines to Guînes, was a plot of woods and drises of 160 acres, having on its east the Green or Middle Way. Next to this, and between the Green Way and Robert Capp Street, was a plot of 225 acres of wood and waste land, extending southward as far as a way from Fines to Ardres, between which and the Pale was a piece of wood and waste of 30 acres. East of this small plot was another of 25 acres called Hawtingham, a name not shown in modern maps; and again east was a small plot of waste of 15 acres. East of the last plot of 225 acres was another of 205, having to its south Hawtingham or Chalk Pit Way, leading from the wood of that name, and separated from the next plot on the east by the Downs Way, which ran from Fines Wood and the Downs northward. The next plot, 76 acres in extent, reached eastward to Stony Street

or Rue des Pierres, which separated Guînes from Spellac. South of this plot, and parted from it by Hawtingham Way, was a plot of 110 acres, which reached southward to the Pale by Fines Woods.[a] The above plots were all of wood and waste land; and with 300 acres of "drises in the forest," formed a belt of wood along the south of Guines parish, and continued through Spellac and Camp along the Pale, forming what is now shown on the map as the Forest of Guînes. Northward of this woodland lay the arable and pasture. Commencing again at the border of Mellac was a plot of 270 acres, extending northward to the Ewlin Way and eastward to the Green Way. East of this a plot of 225 acres, south of Ewlin Way, reached eastward to Robert Capp Street, and yet eastward a plot of 555 acres bordered on Spellac.

Meeting the last plot at the Ewlin Way, and bordering on Spellac, was a plot of 150 acres, having for its northern limit the Whitfield or Brickery, and to its west the Park Hedge and town of Guînes. Of the Whitfield or Brickery the survey gives us no details as to size or extent.

The Park Hedge, of 21 acres, was held by the captain of the castle, and lay between the Townside and Castle Ditch to the west, and the road to Andren and Camp to the east. He also held 37 acres north of the Ewlin Way and abutting on Spellac.

The extent of the parish, including 300 acres of drises in the forest, is given in the survey as 2,367 acres, but this does not include the Whitfield. The total rent was 68*l.* 18*s.* 5¾*d.* In the south of the parish Sir Richard Windebank held Vernon's Bush of 18½ acres. Above the town, and "environed with the Plash," were 8½ acres called Cote's Pasture, held by John Poundes. Hugh Giles held 16 acres called the Oke, but their position had not been ascertained. North of the town, by the side of the Plash, also were 4½ acres "sometime St. George's Guild," held by John Bradfield and the heirs of Vincent Moyne. Of the town of Guînes, with the castle and fortifications to the north, there are plans in the Cottonian MS. Aug. I. ii. 23, 51, 52, & 71, which fairly agree with each other. From these and from the details mentioned in the survey, we can to a certain extent reconstruct the town. The market was south of the Castle Ditch, in which is seen the great tower called the Catt or Vatt, and by the French styled La Cuve. From the north-east of the market ran a street to the East Gate, from the south-east a street to the church and churchyard, from the south-west a main street to the

[a] In this plot of 110 acres were Bradfield's Bush of 20 acres and three plots of Queen's Wood, called Guilder's Bush, 11 acres; Watch Hill, 42½ acres; and Hawtingham, 32 acres, the last two abutting on Spellac.

West Gate, which was that for the road to Paris, and another smaller street to the rampire or rampart of the town. A little way from the West Gate a street branched off the main street and ran with curves toward the street from the market to the East Gate. This was Cow Lane, and out of it branched a small way to the traverse. Between Cow Lane on the north and east and the rampire was a place described as "sometime the Hospital" or Sister House; this was held, with 2 acres of land, by Sir Henry Palmer. A little to the east of this was the Scottrye, which was held by Robert Leader with a house called the Rooke. "The Carpentrie" was also in this part of the town, and was held by the same. A mansion called the White Lyon, held by Robert Waterton, cannot be located, but Christopher Clynche held land described as abutting east on the prison ground, and north on the street from the West Gate to the Market Place. Half an acre, "sometime called the Old Market Place," was held by Henry Rogers. John Churchyard, one of the chroniclers of the defence of Guines, held 2 acres called St. Blaize, north of the town.

Hammes occupied the northern and western portions of the modern parish of Hames Boucres, and, according to the survey consisted of 1345 acres. Owing to the great changes effected by drainage and for other reasons, it is very difficult to identify some of the places mentioned in the survey. The Plash of 100 acres, for instance, has been reduced to cultivation; the rampire, which according to the old maps reached from St. Tricaise Bulwark in a southerly direction, is not shown on the modern map. The parish was bounded on the south by Buccard and Pitham; on the north, the detached piece of Buccard and St. Tricaise were separated from it by a stream called the Hurdel; and on the north-east the river of Guînes enclosed Hammes Castle and the marsh belonging to it. The Plash was to the south-east. Abutting on Pitham, and extending northward to the Ewlin Way, was a plot of 238 acres, in the northern part of which Henry Northedon held half an acre, called the Lincke. Next to this plot and between it and Guînes was one of 144 acres. North of this a plot of 512 acres extended to the "Rampire and turnpike outside St. Gertrudes." A small part of this plot touched Mellac. Within the Rampire and turnpike was a plot of 189 acres, north of which was the common of Hammes, 50 acres, between the Goyle from Newenham Bridge and a small river or stream from Hammes Castle to the Guînes River. To the north-east and east of the Plash was the Conigree, and to its north-west was a plot of 112 acres extending to the "causey from Hammes turnpike to the castle." This castle has been described among the defensive works of the Pale, and near it was also a

watermill, which with the Plash was held by the captain of the castle; a meadow of 21 acres, called the Lists, and a hopyard are also mentioned in the survey. The rent of the fishery occupied by the captain was paid partly in kind, in rent wheat, and rent capons and hens helping to make up the amount, namely 60 shillings. The other rents, as of the farms: the Lists, the Hopyard, Conigree, Watermill, Fishery, Fowling, tolls of Guînes, of the Causey, of Ballangen, the Quints, the Frayes and Bloodwytes, etc., amounting in all to 110*l.* 5*s.* 4*d.* appear to have been paid to the captain of Guînes Castle, the Conigree of 10 acres, with some 20 acres of meadow and marsh about St. Gertrude's, and 15 acres of rough meadow, were the livery lands of the captain of Hammes.

A place called the Helmbones, containing 62 acres, is mentioned as lying between the Hurdel and the way from the Castle to the Canevessary (in Pitham), but its site has not been identified.

The site of Hammes Castle is on the small quadrangle shown close to the farm called Fort Château, at the end of the road running north-east from the village of Hammes and west of the *écluse à quatre faces*, or *écluse carrée*. *La planche tournoire*, a little above this on the Guînes River, and seen in some modern maps, marks the site of one of the "turnpikes" of the defences of 1556. The church of Hammes was destroyed during the Revolution.

The common of Hammeswell, 2 acres in extent, lay between the roads from Guînes to Stone and Fynes to Calais.

The rents of Hammes were paid partly in kind and partly in money. Thus the total rents were in money, 21*l.* 10*s.* 4½*d.* In wheat, 50*l.* 1*s.* 8*d.*; that is to say, 302 rasers, 2 bushels, at 3*s.* 4*d.* a raser, "according to the old extent made by Sir John a Dauncey," and in capons and hens, 13*s.* for 12 capons and 2 hens, "according to the aforesaid old extent." The grand total was 72*l.* 11*s.* 0*d.*

In this total the mill and the waste ground were not included.

Hervelingham, or Helveninghem, is still seen on the map as a commune, but its present limits are not quite the same as in 1556, when, according to the survey, it reached as far as the sea. Its boundary towards Sandingfield has also changed somewhat. Its north-eastern boundary was, as now, parts of Scales and Bonninges parishes, and its southern limit was the Pale, Mount de Coples now Mont Couple, 160 metres in height, being nearly the western point. It is probable that this Mount de Coples was the hill referred to in the treaty of Bretigny, where "*in circuitû Montis Calbally*," which Rymer gives in the French version as Kalcully,

occurs. This hill is the western extremity of a range of high land extending from the Forest of Guînes.

The parish of Hervelingen was traversed by the highway from Whitsand (the modern Wissant) to Guînes. The road from Scales to Bonninges is noted in the survey as the boundary of part of the parish, but it must have been an old road and not very direct. Another road in the survey is that from the village of Hervelinghem to Hundingberg. Unless this last is meant for the modern Audembert south-east of Mount Couple, it no longer appears on the map.

The extent of the parish was 1,492 acres, with a total rent of 40*l.* 18*s.* 6*d.* The chief holding was Barkinstead, of 200 acres, occupied by John Knight and situated in the south-east of the parish, next to Sandingfield. Abutting this place on the south, or outside of the Pale, was M. de Wavering's ground, some 100 acres, occupied (so says M. Pigault l'Espinoy's map) "by a gentleman of Picardy, who claims rent for it from the Hospital of Sandingfield." John Knight, also held 16 acres, part of Mount de Coples, and 20 acres called Mont à Ramons in the vicinity. Further north in this parish he also held 8 acres on Mount Pretez, which, though not in the modern map, appears to have been the high ground in the north-west of the parish. Edward Bodele held 52 acres of Mount Raymond, and Jo Lucking had 250, called the Rede Wagins. This has not been identified. The Queen's Drises or waste land of 80 acres were on the edge of the Pale. At Rannies Holt, now Raméceau, and according to a charter of Guînes known as Ramarssaut in 1280, the heirs of M. Whethill held 16 acres. This is a curious instance of a name apparently English being only a corruption of an early French one. This parish was the only one in the Canton of Marquison which was occupied by the English.

In the survey this parish is divided into the following plots. One of 805 acres lay between the road from Whitsand to Guînes on the south-west, and Scales and Bonninges on the north-east, and must have reached to the sea on the west. On the south-west of this was a plot of 440 acres, with the encroachment by the French to its north-west, and Sandingfield south. South-west of this was Barkinstead of 200 acres, and just where the road to Guînes left the parish to enter Sandingfield was a small plot of 24 acres, having Sandingfield Quarry on its east and Barkinstead on its north.

The actual point where the Pale reached the sea was no doubt the mouth of the small stream still called l'Anglais. This stream was then called Summers' Brook, from its source at Sombres, and though not named on the modern maps

is shown a little south of Estrouannes, the Strones of the survey. This stream is the actual boundary of the Boulonais.[a]

On the roadside, at Hervelinghem, a little east of the church, stands the shaft of the old village cross of English days. It consists of two pieces of about 9 feet, and about 3 feet high, in the form of a tapering shaft of octofoil section. The shaft taken as a whole tapers from a diameter of about 18 inches at base to about 9 inches at top, and is surmounted by a plain capital about 10 inches in diameter at top, tapering down to 9 inches at its lower part, where it rests on the shaft. Its height is about 6 inches.

The shaft rests on a moulded base, consisting of a plain circular ring about 2 inches high, above a moulding about 3 inches high, which rests on the deeper circular moulding of 4 inches in height.

This last has four splays reaching to the corners of the square base of about 36 inches square and 1 foot high.

The whole is on a built-up base, about 3 feet 6 inches square and 2 feet high.

On the top of the capital, where was once probably a small cross, has been fixed a small modern iron crucifix, about 15 inches in height. The shaft is of hard coarse-grained dark stone, the base of Caen stone.

When the French Commissioners, in 1560, visited this place, they found five Englishmen and women occupying the church. This gives a good idea of the desolation and ruin which ensued on the loss of the Pale.

In 1511 the church of Overingham (perhaps a mispronunciation of this parish name) in the marches of Calais, was granted to William Bragges.[b]

Mark, acccording to the survey of 1556, was bounded on the east by a street from Wale Dam parting it from Oye down to Offkerk, which formed with the Great Old River, now the Watergand du Sud, and Crane Street, the southern limit of the parish. On the west the Green Bank divided it from St. Peter's and the Scunnage. Included in the parish were also the ancient parish of Cowswade and Capple, which extended south to the Pale and west to the watercourse from Guînes to Ardres, and the large marsh called the Mainbroke. Taking first the parish of Mark, it was divided in the survey of 1556 into the following plots. Next the sea, and stretching between the Scunnage and Oye, was one of 535 acres called the Hemmes. This and another plot of 151½ acres, which bordered on Oye

[a] On the banks of the l'Anglais one of the English manufacturers of tulle in St. Pierre has built a house.

[b] Rymer.

parish and was called the Cling and Polders, lay north of the way from Calais to the Sluice near Gravelines.

South of this way were two plots separated by a way from Wale Mill to the spoye or sluice gate which let the waters of the north watergang of Oye into the Hollet. The western plot, which reached to the Hollet, was 624 acres, the eastern one of 361 acres had the north watergang to its south. The next plot south of the last was 540 acres called the Haille Land of Mark, parted on the west from Mark Heath of 867 acres by the Hollet, which enclosed the Heath on the north. To the south of the Haille Land were Mark Pasture of 220 acres and another plot of 140 acres on its east, both reaching south to the Havon or East River. In the corner north-east of the junction of the Havon and the Hollet was a small plot of twenty-six acres. To the west of the Hollet and south of Mark Heath was a plot of 586 acres extending south to the Great Old River, between which and the upper part of Cranebrook Street were 172 acres. The above constituted the actual parish of Mark.[a]

Stretching across the parish were 65 acres called the Downs. These abutted east on the Downs of Oye. The partition of the two parishes passed through the Pasture of Waledam, of which 48 acres were in Mark and 115 in Oye.[b] In the plot of 624 acres were two holdings of R. Arneway. The northern one of 37 acres was called St. George's Land, and south of it were 18 acres, part of the Brick Oven, and Nicholas Sutton held Wale Mill just south of the way from Calais to the Sluice by Gravelines. In the plot of 540 acres Ellin Dodd held 20 acres, part of the Pollard, on the east of the Hollet, Nicholas Sutton held 70 acres, called the Barkery, and next to him Robert Mountar held 56 acres called the Burthen on the borders of Oye. Robert Torrayne, the trumpeter to the Queen, also held land near this. This plot, also called the Haille Land, at one time belonged to the chapel of Mark. South of it was the plot of 220 acres called the North Meade or common or pasture of

[a] John Princeday, or Pinside, whose name occurs often in the perambulation of Mark and Oye, held land in both these parishes where the way from Calais to the Sluice crossed their borders.

[b] The Hemmes land, called Wale Hemmes, which stretched across Mark Parish, included in it cart of the pasture of Wale Dam, which also extended into Oye. "The tenants and inhabitants of Wale and others of the lordship of Mark and Oye held the pasture of the said Hemmes pastured by the cattell of the said tenants and inhabitants to adioystment, paying yerely for every horse or mare xx$^{d}$ qr. and for everie oxe or cowe xij$^{d}$ qr. and for every shepe . . . . w$^{ch}$ hath byn answered communibus annis x$^{li}$ qr.

Mark. This was held without rent by the chamber of Mark, who in the 22nd of Edward IV. received it in exchange for the Mainbroke, from that king. In the plot of 867 acres, west of Mark town, Sir John Butler held 251 acres, called Mark Heath, extending westward to the Scunnage. East of the heath Ellin Dodd held Mark Mill.

The Old Castle of Mark, now the Castle Green, was held by Sir John Butler, this was just south of the way from the Havon to Oye Bridge. Thomas Wells held an "over-draught or overlope thwarting the Havon from north to south," just east of the Hollet. This was "a dam to wind over such boats as come from Gravelines to Calais, or from Calais thither." The Poll yard north of the town was held by T. Towchett, who had 60 acres, and Ellin Dodd, who had 20 acres. The place called Bulbane in Mark town lay north of Vine or Pintle Street, and the way from Calais to Guemps bridge. Of this place Margaret Dirickson held two acres, "and the rest of the Bulbane" (2 acres) was held by Giles Chauncey "by demise of the receiver, the same being first called in church by order of the countrey no other ꝑson offring any fine or rent for the same." The church of Mark is a modern one.

The survey states that the bounds of the parish of Cowswade and Capell were: north, the Old River parting it from Mark; east, the Hollet; south, the Pale; and west the watercourse from Ardres. This was divided into the following plots: Next to the Hollet and reaching south to the Goteflete was one of 427 acres, having on its west Middle Street, which parted it from a small plot of 170 acres. To the west of this was a plot of 760 acres, extending westward to Colham Street, which separated it from that parish, having on the south and east the North Lead watergang, and on the north the Scunnage. South and east of this last was a large plot of 925 acres, also touching Colham Street, and having the Mary Lead to its east, and the Goteflete to its south-east. South of this plot and bordering on the Hollet was another plot of 850 acres, extending to the Sing Bank, which parted it from the Mainbroke, and touching the Cowswade to the south-east. Another small plot of 125 acres also rested on the Sing Bank with Colham Street on its north, and between the Main broke on two sides and the French territory lay yet another plot of 500 acres.

In the Edward IV. terrier this parish was called by its old name, viz., St. George's Church. The plot of 850 acres was the Capel, so called from the abbey of La Capelle, built by St. Ide about 1090 on the site now occupied by the farm called La Grande Cappe. The abbey was destroyed in 1347 by the English, and no traces of it, save fragments of worked stone from time to time exhumed,

now exist. Besides the Capell, the Cowswade, 2,000 acres; the Deppe Broke of 300 acres; Lambert's Gaps, 132 acres; St. George's lands, 65 acres; the Gold Flete or Gote Flete, 300 acres; Remels, 462 acres; Sempt, Red Broke, Piers Water, Afterstrell, and other lands and marshes are mentioned. The Main Broke of 4,900 acres was then included in the parish and was also known as the Common of Mark, which the freemen of that parish exchanged with the King (22 Edward IV.) for the North Mede. The Cowswade, now the Ile de Caushoise, extended southward to the line of division between the two nationalities, and included the land now shown on the map as les terres Brugnobois. The limit was about the road shown as going from Buscot (where was Boots Bulwark), crossing the high road to Ardres, and then turning south-west to the river to Ballangen, where stood Jones' Bulwark. In a charter of Artois of the fourteenth century it is called la Paroisse de Couchewade.[a]

[a] The following extract from a letter from Henry VIII. to Howard, dated 27° Aprilis, 1541, and printed in the State Papers of Henry VIII. will explain the position of the Cowswade:

"And that the Couswade ys no parcel of Arde it appereth by ther oune allegation, by the which it is alleged that the Couswade was a parishe seperate from Arde before the said treaty of King John. . . . . And as to the right of the travers, it is most manifest and redy to be proved, if thinges maye be tryed and determyned frendly and by reason, that whenne there was no bridge, as that bridge called Cowbridge hath only of late dayes been permitted to be made on an hardle and a fewe flakes, the bote of passage over the ryver was on our side at Botehakes, and not on theirs as it ys surmitted. And where the situation of two houses ys brought in, which be alledged to stande betwen tholde ryver and the newe ryver, as they dyvyded them, and to be of the parishe of Arde; as the grounde and treatye conferred together woll playnly shewe, that there was never but oon ryver, and the same of necessitie the ryver beyonde Poile, that is the ryver that nowe hath his cours; soo it wolbe wel proved that, til of late yeres, those houses that have been ever reputed and taken of the parishe of Balingham and not of Arde. And, if thinhabitauntes there have, for there commoditie of late tyme, reasorted to Arde, bycause it is nerer to them, and not to ther very parishe churche, this ther use maketh no title, but the right remayneth as it dyd, and the grounde, the treatye, and the prouf of thould use must nedes prevaile and take place. And where greate alligations be made of the rolles of thaccomptes, though they be not to be compared to the treatye, yet, if they shulde be admitted as thinges autentique, they make nother for the clayme of any parte of the Couswade, ne for any travers in the same, but for the tole which they have taken at the turnepike set on their side. And where they saye that the ryver which goeth beyond the Poile is joyned to the ryver of Hiliar, and from thens to an olde Dike which is called Olde Ryver, going to the lake of Guisnez, the which Olde Ryver maketh the seperation of the grounde of Marke and of the said Couswade, whereby they wolde make an other ryver for our limite, excluding Us from the Couswade; for aunswere herunto you maye saye, as the trouth is, that there is no suche ryver as they alledge, and that the place where they alledge to be suche a ryver ys drye evry sommer, and hath no discent according to such limites as is comprised in the treatye of King John; but the same

In the plot of 170 acres, John Prowde held 140 acres of the land called Pierbone, which consisted of 145 acres. These lands lay between the Rope Dike and the Main Lead. In the 925 acre plot Griffith Appenrith held 404 acres, part of the North Lead, between the street of that name and Goldflete Street, and east of this the heirs of Robert Arneway held 250 acres called Ecclebergge or Ikelburgh. Appenrith also held the Sampney, south of Ikelburgh Street, but this may have been another name for the former holding.[a]

In the plot of 850 acres and between the Goteflete and the Cowswade Robert Whethill held the farm of 641 acres, called the Cowswade with the Common or warren of Conies.

The Main Broke of about 5,000 acres lay south of the Sing Bank, which parted it from Colham and Mark, and north of the stream between Guînes and Ardres. A portion called the West Main Broke, separated from the eastern part by the Guînes river, lay south of Scales Dyke and north of the marshes of Froyton, Nele, St. Tricaise, etc. The eastern part was divided into various plots by banks and ways which intersected the northern portion of it. Of these there were the Marsh Bank Way running north-east to south-west, and then turning north-east. Coskie's Way, a continuation south-east of the first part of the Marsh Bank. The New Main Bank, running south-east from Guînes river toward the mount of Boothackes. Also the New South Way, running south-east. From north-east to south-west ran Colham Way, High Thorn Way and Michaelmas Bank Way. It is very difficult in the survey to identify these with modern roads, as the banks are not always mentioned by the same names.

The plots mentioned in the survey amount only to about 3,470 acres, and the rents to about 172*l.*, but it is probable that those numbers represent only the land that was let.

ryver, wheruppon the Cowbridge was lately set, hath and ever had the same course and discent agreable to the said treaty."

The question of the boundary had been rendered urgent by reports to Henry VIII. from Lord Sandys, then captain of Guînes (1540), and others, describing the recent additions to the fortifications of Ardres, and the adoption by the French of the passage by Cowbridge instead of the usual one *viâ* Newenham Bridge. Lord Maltravers had indeed attempted to stop the French works at Cowbridge, but had received a protest from the captain of Ardres.

In the *Chronicle of Calais*, Camden Society, vol. xxxv. will be found further information on this matter.

[a] The Capell Broke held by Appenrith lay south of Wild Horse Street and west of the Main Lead. Appleblome Street is also mentioned as the eastern boundary of some of his land.

The manor of Heresmote, with a brick two-storied house, is also mentioned; and a farm of twenty-four acres (at Colham Hill) lately added to the Heresmote, which was let for twenty years, with power to renew for further periods of twenty years at a fee of "a breakfast of a capon and a gallon of wine," *toties quoties*. The tenant was bound to deliver as part of his rent "oone M$^{l}$ of garbage at 20$^{d}$st the c$^{t}$, paying yearly at Michalmas or within 13 days 3 shillings and fourpence the acre." Henry VIII. let the Mainbroke to Sir R. Wingfield for 40*l*., but it was afterwards surrendered in exchange for Pepling and Osterwick.

The old castle of Mark stood east-south-east of the church, which dates from the twelfth century. A congress was held near the town and a camp erected in 1555 to bring about a reconciliation between Philip II. and the French king. The modern parish of Les Attaques was separated from Mark parish in 1835, having previously been known as Bas Marck. The modern name is derived from the word Estaques, *i. e.*, piles or stakes marking boundaries, etc., in the Marsh.

The acreage of Mark, excluding the Cowswade and Main Broke, is given in the survey as 8,044, and the rent 267*l*. 9*s*. 6¾*d*.

Mellac, or St. Blaize. This parish no longer exists as such, and only the latter name is now to be found on the map as part of Guînes, into which the whole parish has been absorbed. Its ancient limits were to the north-west, the parish of Buccard was parted from it by the Fynes Way. To the north-east Mellac reached to the Marsh, which formed its north-east limit. On the Guînes, or south-east side, the boundary was a line from the Marsh to a little west of Guînes town and along the edge of the then existing Guînes Plash. Passing round the west of Guînes town the bound struck the Buck Way from Guînes to Fines till the Pale was reached. The Buck Way is now the straight road seen on the map running south-south-west from Guînes town. The extent of the parish was 1,075 acres, and the rent 33*l*. 9*s*. 9½*d*. The chief roads traversing it were Guînes Way and the Ewlin Way, both from north-west to south-east. South of the latter was another coming from Buccard, called the Bore Way, also running north-west to south-east. A small lane running north-east to the Little Common and the river from Newenham Bridge is also mentioned in the survey. In the south-east of the parish were the Flaketts, 104 acres, which name has survived; and to the south of them and close to the Pale was the bush called the Sallage, thirty acres in size. Between the Flaketts and the Buck Way were the King's Forest of 107 acres on the edge of the Pale, the King's Drises or waste ground of twenty-seven acres, and the Queen's Forest, the whole amounting to some 283 acres.

The Flaketts were held by John Grante, who also had a bush of eighteen acres called Reynes Gelders, and ten acres called Newfoundland.

On the Buck Way, and near to Guînes, Adrian Spryte held six acres called Pyerbonne. In St. Blaize Robert Whethill held the conigree of seven acres. The Walle, a name still to be seen on the map, and a meadow called Bell Yard with marsh, the whole amounting to ninety-eight acres, were held by —— Beynton. In the north of the parish the survey mentions Stace Merlyn and the river as forming the southern bound of the marsh of ten acres, which had Guînes Plash to the east and the street to the common to the west. Stace Merlyn was probably a tenant's name; the French writers all omit to mention this parish, which, no doubt, was only of the English occupation period.

In the survey the parish is divided into the following plots: Commencing at the Pale was one of 283 acres reaching across the parish, except towards the west, where were the Flaketts of 104 acres, and just above them some waste ground, etc., called the Sallage, thirty acres in extent. North of these woodland plots was one of 295 acres, reaching to the Ewlin Way, between which and the Guines Way was another of ninety-five acres. North of this, and extending to the Little Common and the Fishery, was a plot of 240 acres.

Nele, now Nielles les Calais, appears to have had the same limits as the modern parish, and lay between Froyton and St. Tricaise; its north-east limit being the river from Newenham Bridge, and the south-western part ending at a stone where the three parishes met Bonninges. The extent of the parish was 400 acres, and the total rent 17*l.* 7*s.* 11¾*d.* Ewlin Way crossed the parish near the Stone,[a] and above that the Mill Dyke, apparently not far from the way from Calais to Guînes. Still more to the north-east, the road passing through the villages of Froyton, Nele, and St. Tricaise, traversed the parish in a south-east direction from the beginning of St. Margaret Street. Guilte Street cannot now be identified, but it ran south-east from St. Margaret Street. Between St. Tricaise and the Common Street running from what is now Basse Nielles to the Bulwark at the bridge over the river, were the chief house, orchards, etc., of Richard Cokeson, the water bailiff. This holding, which was called Bablins, consisted of sixty-two and a-half acres. The same Cokeson had also about fifteen acres called Ded Manne, situate at the crossing of Cokilian Street and Fynes Way. This parish has at times been called Acle according to the survey, and Demotier considers that it only dates from the period of the English occupation. It is certain that the church or chapel of Nele

[a] From this stone ran a way to the Marsh known as the way by the Bush called the hand.

was dependent on that of Calkwell, for on 13th July, 1411, Henry IV. desired the Archbishop of Canterbury to admit John Thorpe to the church of St. Mary of Calkwell in Picardy with the chapel of Nele annexed thereto (Rymer). Query if Acle were the Ales or Axles which M. Haignèré says was at one time part of Calkwell, and which he supposes to have been where is now la Chaussée.

The parish is divided in the survey into the following plots: Commencing at the stone where Froyton and St. Tricaise joined was a small one of eighteen acres reaching to the Ewlin Way, between which and the Mill Dyke was another of sixty-five acres. Between this and the road from Froyton through Nele village to St. Tricaise, was one of ninety-five acres. North of this, a plot of 195 acres extended to the river.

Newkerk, now Nouvelle Eglise, appears by a charter of St. Bertin of 1132 to have been known in early times as Herwega, from which was derived the name Harraway, applied not only to the parish itself but also to the way and watergang now called the Watergand de Nouvelle Eglise, which forms the eastern boundary of the parish, separating it from Oldkerk. The name Niwa kerka, however, appears in another charter as early as 1185.

The northern boundary of the parish was the Havon, and the southern the Polyvard. On the west was Quade Street or Watergang of Offkerk from the Havon, as far as the meeting with the Stakemart, now the Watergand du Tracmare, which continued to the Polyvard.

The extent of the parish was 2,162 acres, with a total rent of 47*l.* 0*s.* 1½*d.* The chief roads and watergangs traversing it were the V. Street, on which was the village of Newkerk; Knight Street or Riddar Street, now Rivière de Vinfil; Middle Street, now Meer Straet, all these from west to east; and from the Havon southward the Nunnery, which gave a name to a large holding of 346 acres, on its eastern bank. The Bowes Brook, of 300 acres, was in the south by the Harraway Bulwark. In this parish also were 200 acres of the whole 300 which constituted the Pole Brook, a marsh which lay in this and the next parish of Offekirk. Another marsh, called the Great Hove,[a] also lay in these two parishes; the eighty-two acres in Newkerk being held by Richard Blunt. The Edward IV. terrier also mentions the names of the Brode Mede of 246 acres next to the Nunnery, and the Red Broke of 200 acres south of the Stakemart or Stakemark.

In the survey the parish was divided into two plots, the northern of which reached from the Havon to Robert Reymer's Street, and contained 1,025 acres; the southern, of 1,137, reached to the Polyvard.

[a] In the Edward IV. terrier the extent of the Great Hoff is put at 496 acres.

Robert Reymer's Street is not shown on the modern map, but evidently ran east and west somewhat north of the village of Newkerk.

Offkerk or Holfkerk, now Offerkerque, is mentioned in charters of 1100 and 1206 as Houve and Hovo, and appears to have been identical in extent with the modern parish. It lay east of Guemps, from which it was divided by the Chauntryne or Sandryne, now the Sauve en Temps and Skane Street, and had the Polyvard or English Street as its southern limit. From Newkerk it was separated by the watergang of Offkerk, then called Quade Street, evidently another of the same name as that in Oldkerk and the Stakemark. On the north it extended beyond the Havon, having for its limit part of the Procession Way which separated Oye from Mark, and part of Our Lady Street, meeting it at a place called the Chauntry. The extent of the parish was 2,853 acres, and the total rent 133*l.* 3*s.* 1*d.* It was crossed from west to east by Middle Street now Meer Straet, Knight or Riddar Street now Rivière de Vinfil, Slang Street now Watergand de la Rue Serpentine, and Guemps Street, which in its continuation was called V Street. From the Havon southward ran Pounds Watergang, Peter Jestes or Jesse's Watergang, and Sandy Street; this last is shown in M. Pigault l'Espinoy's map, but is not mentioned in the survey. Besides these, the Boway, and others not identified, are mentioned in the parish. The chief holdings were parts of the Polebroke and Great Hove, which extended also into Newkerk, and were owned by Sir John Butler and Richard Blunt respectively, the Bowbroke and Depebroke, and others. The ninety-one acres north of the Havon was held by Adrian Lamons; and, besides the Procession Way and Our Lady Street from Offkerk Bridge or Statford Bridge, had a bank called the Chauntrelle as its limit.

The rent of the parish seems to point to the land being better than in those to the east of it.

In the survey the parish is divided into three plots. Of these, one of 119 acres included all that part north of the Havon. The next, of 1,601 acres, contained all the land down to where Guemps Street crossed the parish; and the third, of 1,133, consisted of the remainder down to the Polyvard.

Oldkerk, now Vieille Eglise, was the south-east limit of the English Pale and occupied the same ground as the modern parish. The name is a curious instance of the changes which have occured in this part of the country. In charters of St. Bertin's Abbey of the years 1132 and 1225 it was called St. Audomarikerka; gradually this became Oudekerke, which the English occupiers reasonably rendered Oldkerk in contradistinction to the neighbouring parish of Newkerk. On the return of the French the original name was neglected and a strict translation

of the English title produced the modern name. The limits of the parish were on the north the Havon, on the east the Flemish Gracht or March Dike now called the Drach, from the Havon by Capel Bridge, where now the map shows Barrière de France down to the Hook on the Polyvard or English Street. At this point stood Knowles' Bulwark and in later times the Fort Rebus of the modern map. In the Hook is seen the French term for the country outside the Pale in this part, namely, Pays de l'Angle. The southern boundary identical with that of the Pale was the Polyvard westward to the Harraway Bulwark, which stood on a piece of ground belonging to Richard Blunt and now seen as Fort Bâtard. Between this and the Hook, where now is Port Neuf, was another port called Crabler's Bulwark. The Harraway from the bulwark of that name to the Harraway Bridge or Oye Bridge, now Pont d'Oye, on the Havon, formed the western boundary of the parish parting it from Newkerk.

The extent of the parish was 4,951 acres with a rent of 256*l.* 15*s.* 6¼*d.* The chief ways and watergangs in the parish were the Venne or Fenne, now the Watergand de Vieille Eglise, traversing the parish from north to south, passing by the village, and reaching the Polyvard at Crabler's Bulwark. The Baines, now Banse Vernalde, going from the Havon near where is now Pont Loquet as far south as V Street, now Watergand de la Petite Serpentine. For some distance it ran close to the Gracht. From the Baines branched off two other ways and watergangs. The Flete which ran to the Elk Dike, North Street, now Watergand du Vinfil, and Quade Street, now Banse Dubracq, which ran to the Pale near Crablers.

The V Street, a continuation of Colham Street, after passing through the parishes and villages of Guemps, Newkerk, and Oldkerk, terminated, so far as the Pale was concerned, at Capel Bridge, also called Van Sothering's Bridge.

According to the P.R.O. terrier *temp.* Edward IV., there were four large marshes on the southern edge of the parish, viz., the Great Flete 180 acres, the Flete 103, Gallet's Wall 74, and Brown Way 140. North of Crablers was Pynnings Broke 40 acres, and in the south-eastern corner by the Hook were the Polles or Polder of 106 and Mark Lands of 91 acres. The Clithoff 821 acres occupied the north of the parish. In 1556 it is noted that Ric. Blunt held 173 acres called the Vosse Bank, 90 acres called the Havon Broke, and 105 acres part of the Flete Broke, all in the west of the parish. Adrian Priseley also held 152 acres of the Drough Broke in the same part. Thomas Sprot held besides other lands 255 acres part of the North Wood in the northern part of the parish.

In the surveys the parish was divided into three plots. The northern and largest included all the land north of Five Street or V Street, the prolongation east of Guemps Street. The next plot of 991 acres was the portion of the southern part of the parish lying west of the Venne or Fenne watergang, and the balance of the parish formed the third plot of 1310 acres.

In Oye the chief roads and communication ways were the Procession Way forming its boundary on the west from Mark, and then at the south-eastern corner turning eastward and parting it from Offkerk parish on the south as far as Oldkerk Bridge and the commencement at that point of Our Lady Street. This last ran northward to the place called Red Chamber. About half-way down Procession Way, Bandike Street branched off and also ran to Red Chamber. Another way, called the Street through Waledam Pasture, branched off from Bandike Street and ran down to a little above Oye town. About midway from Bandike Street and the south-west corner of Oye another street, called the way from Mark to the sea-bank at Tartar's Land, branched off from the Procession Way and crossing Our Lady Street ran to Oye Town and then turned northward to Tartar's Land. From this street somewhat east of Oye Town ran Market Street south-eastward to the Havon, the south boundary of the parish. Through Oye Town and from the sea-bank to Oye Bridge ran the Harraway, continuing its course southward between Newkirk and Oldkerk. Besides the Bandike Street and the others running eastward there was the way called Calais Way, which ran from John Pinside's House towards Gravelines and down to Calais, the dam by the sluice. North of this was the bank or way which formed an outer protection to the parish of Oye and ran between the Hemmes and the Cling and Polders, turning south-eastwardly down to the sluice gate. Besides these banks, which in most cases had drains or watergangs along side of them, were the North and South Watergangs. Of these the first began at the Havon or Sluice Havon, as it was called in that part, a little north-east of the end of Oldkerk. From thence it flowed westerly above Oye Town, and with many turns and bends to the partition of the parish from Mark.

The South Watergang started from the Havon about the middle of the north boundary of Oldkerk and flowed westerly between the Havon and the road to Oye Town, eventually rejoining the Havon at the junction of Guemps and Offkerk parishes by the head of the Chauntryne.

In the survey, this parish of 8,083 acres is divided into several plots, and as these divisions in some cases follow roads, in other cases watergangs, it may be worth while enumerating them and their extent. At the same time, as the tenants

in many cases held lands of the same name in different plots, their holdings will be mentioned elsewhere.

Beginning at the east were the East Hemmes extending to the Sluice Havon and Gravelines Road on the east, and to a seadike called the Lodge Bank on the west, and containing 1,391 acres. West of these were the North Hemmes or Flowe Marsh of Oye, extending to the parish of Mark, and containing 1,202 acres. South of these, and also abutting on Mark, were the Polders and Cling, 675 acres in extent, but only reaching so far east as the East Hemmes, which do not appear to have had any land of this class to their south. These polders and cling lay between a seadike on the north and the way from Calais to the sluice on the south. This last-named way parted the arable and pasture lands of the parish from the more exposed portion. Beginning now at the borders of Mark parish was a plot of 750 acres reaching east to Our Lady Street, next to which was one of 450 extending to Harraway Street by Oye Town, whence a plot of 1,130 acres extended to the bend southward of the way from Calais to the sluice. These three plots lay north of the North Watergang. Between the North and South Watergangs, and again commencing at Mark, were successively plots of 637,[a] 420, and 608 acres parted from each other as the last series, but ending at the Sluice Havon, which here bent south-westerly to the Havon. The next series began at Our Lady Street, and consisted of plots of 514 and 302 acres only, being, as plot 637, bounded on the south by the Havon.

Identification of ancient sites is not always possible, but taking the plots in the order given above, most of the important holdings will be mentioned. It will be noticed that many names occur over and over again, the tenants possessing land in the various classes, such as arable, cling, and Hemmes, like the "striped land" in Ireland, where each tenant has a piece of good land, reclaimed land, and bog, one beyond the other.

In the East Hemmes or Flowe Marsh, of 1,391 acres, were lands of the Great Coppe and the Little Coppe, held respectively by William Grene and Dolphin Andrew. Next westward the North Hemmes, of 1,202 acres, though, according to an old survey, there had been 1,580, "the variance whereof is grown by the sea," had within it 540 acres, part of the Lodge held by Andrew Harbert; and west of these the Tartars of 240 acres, held by William Meuse. Next west were 600 acres called The Paskyns, held by R. Whethill, who also held part of the Red Chamber Hemmes abutting on the Wale Hemmes in Mark. In the plot of 675

[a] This plot of 637 acres reached south beyond the South Watergang to Offkerk parish.

acres Dolphin Andrew held 92½ acres of the Little Coppe and William Grene 89 acres of the Great Coppe, John Afield 43½ of the Beake, James Haynes 30 of the Whitehouse, Andrew Harbert 161 of the Lodge, Richard Blunt 7½ acres *a conigree*, and William Meuse 167 acres of Tartar Place.[a] In the 750 acre plot on the east was Red Chamber of 44 acres, held by Robert Whethill, then 49 acres called Kopter's Place, held by John Grene, and abutting on Baudike Street, was Monk's Place, of 67 acres, held by the same. In the next plot, of 450 acres, were no specially-named holdings, but in the 1,130 acre plot were more portions of farms already mentioned, such as on the east William Grene held 10 acres part of the Great Coppe, Francis Maskull 122, called the Little Beake, John Afield 68 acres of the Great Beake, James Haynes 130 acres of the Whitehouse, Andrew Harbert 100 acres of the Lodge, William Meuse 200 acres of the Tartars, and Andrew Harbert 59 acres of the Dyke. A little west of the Dyke was the way from Oye Castle to Oye Bridge, and on the west side of this road, about 600 yards west-south-west of Oye Church, stood the Castle of Oye, in a plot of 420 acres. This fortress[b] was captured in 1436 by the Duke of Burgundy. On its recapture by the English it was much strengthened by two large bastions and a double ditch round the whole, a narrow path alone giving access to the castle. It was again taken by the French under Marshal de Biez in 1545, but soon recaptured by the English. Monluc speaks highly of the strength of this work. After 1558 it was razed by order of the Duke of Guise. At this period the more illustrious of those who fell in the attack on Calais were interred in the church.[c] In the plot of 637 acres were no holdings with special names. In the 420 acre plot stood Oye Castle and a windmill, which, with 156 acres of land, was held by Thomas Fisher. To the west of the Castle the same Fisher and Parnell Bowring held portions of the Brent Pile, probably some large building destroyed by fire previous to 1556.

In the plot of 608 acres were more lands of the farms already mentioned. F. Maskull held 76 acres of the Little Beake, J. Afield 87 acres of the Great Beake, and James Haynes and others parcels of the ground called the Fowler, amounting to some 191 acres.

In the plot of 514 acres, Philip Case held 94 acres, part of Vincent's Way, on the west of the road to Oye Bridge, and Richard Broke 350 more acres of the same. The next plot of 302 acres, on the east of this, amongst other

[a] The Lodge Hemmes and Tartar's Land were divided by an ordinary way, called "Ram de Gravens," now a creek.

[b] The remains are visible just on the west edge of the village north of the modern road.

[c] The present church is a modern one.

holdings, had a parcel of free land called the Flynderbusshe, 13 acres in extent, held by William Porter.

In the description of the boundary of the Pale, it has been mentioned that the old limit was beyond the present canal of Gravelines, and included the St. Pol Hemmes. In the survey these Hemmes are not described, nor are tenants mentioned. So also the Sprury, though its limits are given as surveyed, yet no tenants are mentioned, nor is the extent of the locality given. From the boundary, however, we learn that it occupied a triangular space, which may be thus described: Two of its sides are formed by the Sluice Havon, from the Ecluse Vauban, shown on the modern maps, down to about the k in the word Drack, and from the Sluice along the River Aa as far as Les Bajettes. These Bajettes are mentioned in the survey as three sluices. From them to the Drack or Gracht the third side of the triangle runs in a bent line, passing Les Mottes, the Moote in the survey. We also find that the Sprury was divided into two parts by a way from near the Sluice to Les Mottes. The modern watercourse from the Sluice to the Aa passing along the fortifications of Gravelines is where what the survey calls the Old Channel of Gravelines ran. This divided the Sprury from the Hemmes of St. Pol. The bearings of "The Great House in the Sprury" would suggest that the modern Ferme de Noel is on that site. Unfortunately nothing appears to be known about this Sprury, and even the meaning of the word has not been discovered. In one place it is called the Spriory, but it is very seldom mentioned. In the map of M. P. l'Espinoy it is not shown. The face of the country has been so changed by drainage that it is very difficult to assign positions to old localities. It is presumed that the "Sluice of Oye" was about where is now the Écluse Vauban, but the survey also speaks of the English Sluice, and if the bearings given are correct this second sluice was about north-west of the first. Oye Sluice was "made new" in 1531. "The 4 acres without the Sluice" were held by the searcher there.

Pepling, a parish the name of which has hardly changed, has varied very slightly in extent since 1556. It lay south of Sandgate, east of Scales, north of Bonninges, and west of Calkwell. In the survey its extent is given as 2,006 acres, with a total rent of 35*l.* 10*s.* 11½*d.*, which includes a reserved rent of the Manor of Osterwick,[a] a district not defined, but lying within the parishes of

[a] The rent of vj$^{li}$ xiij$^{s}$ v$^{d}$ ob. gr. reserved to the king on the grant of the manor of Osterwick, with the lime kiln, etc. surrendered to the king by the Staplers and of the Lordship of Pyshing. with divers rents in the county of Guines amounting to £50 more, making £81 5$^{s}$ gr. granted in

Sandgate, Pepling, Calkwell, Scales, Bonninges, and an ancient place called Besting or Bessings, probably the Bensingue of the modern maps. This reserved rent in Pepling was 6*l.* 13*s.* 5¾*d.* The parish was divided into the following plots: In the north-west corner was one of 207 acres, extending east as far as the Beggars' Way. This way appears to have started with the Ewlin Way from St. Martin's church, and then branched off somewhat to the south. If this supposition is correct it is strange that the name does not occur in the next parish. East of this plot, and lying between the Beggars' Way and the Ewlin Way, was another of 420 acres. East of the Ewlin Way, and extending to the Boulogne Way, which parted the parish from Calkwell, was a plot of 505 acres, reaching south as far as the Besting Way, below which another of 475 acres extended west to the Beggars' Way and south to the borders of Bonninges. West of this plot, and reaching as far as Scales, was a plot of 120 acres. The other plots of 89, 90, 375 acres it is hard to allocate, as many of the roads mentioned in the survey have been altered, and the surveyor himself has at times made errors in his bearings. In the south-west of this parish, near what is now shown as Le Grand Wandin (Wending of the English times[a]), Xtrian Lemes held a place called Quarles' Place, of 25 acres. In the north-west of the parish are the hills called Les Noires Mottes, on which excavations have furnished evidence of pre-historic interments. Churchyard, in his account of the loss of Calais, calls them the Black Neasts.

It was to Pepling church that John Leyland, clerk, was presented in 1530, but, like many others of the clergy of the Pale, he was an absentee.

Sir R. Wingfield, writing in July, 1537, to Lord Lisle, dates his letter "at my manor of Mountfesaunt in Pleeplynge." This place is not mentioned in the survey.

Pitham, now Pihen, lies on the edge of the Pale between Bonninges and Buccard on the north-west and north-east, and south-west of St. Fricaise the detached portion of Buccard, and Hammeswell. It was separated from Bonninges by Cokilian Street, which in its prolongation to the north-east parted Froyton from Nele, and from its northern point the boundary between it and St. Tricaise ran south-east to the village of Stone, now shown on the map as La Pierre. The

exchange by H. VIII. by letters patent of 5 Oct. 28 H. VIII. to Sir Robert Wingfield and his heirs by fealty only, and a yearly rent of 6*l.* 13$^{s}$ 3$^{d}$ "payable only in the time of peace and abstinence of warres," the same being granted to L$^{d}$ W. in recompense for having surrendered the 500$^{a}$ of the Marisbroke which he then held on lease of the King by letters patent at a yerely rent of 20*l.*

[a] It is shown in M. P. l'Espinoy's map.

detached part of Buccard meared with it for a short distance only, and then the south-west limit of Hammeswell brought the boundary to the parish of Buccard, descending south-west to the Pale. In extent it was 2,350 acres with a total rent of 79*l.* 15*s.* 3½*d.* The chief roads traversing it were that from Helveningham and Sandingfield, which passed through the village and then ran east to Guînes. Another which came from Landerton without the Pale, and ran north through Pitham village to Bonninges village. A little to the north of Pitham village Thomas Massingberd held 40 acres called the Rockery, a place name still seen on the map, and not far off but at present unidentified was the house place called the Redde Crosse, one of several holdings of Robert Leader in this parish, in all about 74 acres.

On the south-west limit of Pitham and abutting on the Pale were several holdings of John Hencrite who had about 116 acres. Near to these was the hamlet or village of Waddington, now Wadenthum. Further east and near the road from Landerton (Landrethun) to Bonninges, and abutting on the Pale was Ellington or Darlington, now Alenthun, and still along the Pale were the lands of J. Canvas mentioned on some maps and in the survey as the Canvessarie, now transformed into Quennevacherie. Near to this last was Colway Wood, shown in the Cottonian map as Calayood, and probably incorrectly explained in the Camden Society's *Chronicle of Calais* as Calais Wood. It was 95 acres in extent and was the only woodland in Pitham. In the survey the parish was divided as follows: commencing at the south-west on the Pale was a plot of 420 acres between Bonninges parish and a way from Sandingfield to Guînes. East of this lay one of 460 acres extending to Colway Wood. North of this were 770 acres between the road from Pitham to Guînes and Buccard parish, and the northern part of 700 acres formed the fourth plot.

Saint Tricaise, the Senter Caes of the Cottonian map and now St. Tricat, was in the English days also called Marken. It lay south-east of Nele, from which it was separated by a way to the Marsh from the bush called the Hand. This hand was probably a sign-post with a hand showing the way, it stood at the junction of the three parishes of Bonninges, Pitham, and St. Tricaise. The north-east boundary of the parish was the river from Newenham Bridge, here, as in many other places, called the Fishery. From thence the boundary ran along a small river called Hurdel Creek parting this parish from Hammeswell, as far as the detached piece of Buccard parish which then formed the limit south-west to the borders of Pitham parish the south-west boundary of St. Tricaise.

The extent of the parish was 1,539 acres with a total rent of 60*l.* 2*s.* 8¼*d.*

The parish was crossed from north-west to south-east by the Ewlin way and Guînes Way, on the east side of which last and between the mill dike from Nele parish stood a mill and one acre of land held by Robert Whethill. This mill lay between Nele parish and some chalk pits. In the northern part of the parish abutting on the river from Newenham Bridge was the Moate of 32 acres, but without a tenant in 1556. J. Cokeson held 5½ acres called the Kyfs Hoke, abutting on the river also and forming the north-west corner of the parish. The Court Hill, south of which the same Cokeson held 7 acres, cannot be identified. There was a large piece of ground called the Manor of Polinbroke parcelled out among several tenants, but of its position nothing is known.[a] Demotier says that a place called Arkingond or Hartincourt was supposed to be about identical with the village of St. Tricaise, but he does not mention any authority and the modern map gives no assistance nor does the name occur in the survey. After the capture by the French the parish was occupied by the fugitive inhabitants of St. Quentin expelled by Charles V.

The bulwark of Senter Caes was by the bridge where the street to the common crossed the river from Newenham Bridge.

In the survey this parish was divided into the following plots: Commencing at the south-west corner on the borders of Pitham and Nele was a plot of 155 acres extending north to the Ewlin Way and south-east to the way to the common. South-east of this a large plot of 455 acres reached to the detached portion of Buccard. The next two plots of 224 and 120 acres were north of the Ewlin Way and separated by the street to the Common. North again of these and parted from them by Guînes Way were two plots of 450 and 230 acres, also parted by the Common Street and extending to the Marsh, the second plot being parted from Hammes by the stream called the Hurdel.

Sandgate, now Sangatte, occupied nearly the same limits as the modern parish except that the north-eastern part of Sangatte was then a part of the Scunnage. The boundary there was a dyke running south-south-east from the Hoke, the old place of execution for the lordship of Sandgate, to the bank of the Flowe river which branched out of the creek forming the continuation of Calais Haven. The Hoke was about 1,165 rods west of Risbank Castle. Sandgate was also known as Sclynes, and from the town of Sandgate ran the Ewlin Way, a very ancient road

[a] Walter Shawe held a place of 11 acres ditched about, called the Fowling Place: it belonged to St. Tricaise church. Canon Parenty says that the central tower, apparently of the seventeenth century, is all that remains of the old cruciform church.

which, passing by Guînes, went as far as Terrouanne. Its course through this parish was about south-south-east to the old church of St. Martin, described in the survey as "ruinous." From this point where it entered Pepling its course was south-east to Guînes. The French have given it many names (Chemin Vert, Chemin de Leulingue, Chemin des Saints) but it is always mentioned as the Ewlin Way by the English. The town of Sandgate was burnt as well as the castle by the mutinous troops of the duke of Burgundy in 1436 after his unsuccessful attack on Calais.[a] The southern boundary of the parish was the parishes of Scales and Pepling, and eastward it extended to Causie (la Chaussée). From the town eastward to the boundary of the county of Guînes and the Scunnage were the West Downs and Warren of Conies held by the Captain of Guînes Castle, and extending south to a saltmarsh of 201 acres. Besides the West Downs and Saltmarsh, the parish was divided in the survey into the following plots. From the town westward to Scales was one of 140 acres, east of which one of 800 acres extended to the Ewlin Way. East of this and lying one north of the other from Pepling were plots of 760, 176, 136, and 201 acres, the last touching the Scunnage, and with that of 136 acres, parted from the two first by a way from Sandgate to Causie. Between the 136 and the 201 acres ran the New River with plots of 119 and 175 acres on its north and 62½ and 105 on its south. The last of these abutted east on the Plash.

The Holteway or Hollway passed through the village of Calkwell or Causeye, according to the survey, and was probably the name of the road which is now the main street of la Chaussée. The way separating the parish of Sandgate from Dykeland and the Scunnage was of old time called Moleyne Legalyne.

In this parish to the north of the large chalk quarries was situated the land called Galleymote, often mentioned in the accounts of the siege of Calais. It, with other lands, was given by the French king to Senarpont, one of the commanders on that occasion, and now appears in the map in what was probably its original name Callinottes or Caillemotte expressive of the stony nature of the ground. In 1556 it was held by Sir Maurice Denys. Another place of 8 acres held by Sir Robert Wingfield, and called the Galloway, had reference to the gallows, which also gave a name to Gallows Hill. Gallows Hill appears to have been west or north-west of the chalk pits and the Gallowsway ran west from the Ewlin Way and to the north of the road to Scales. One landholder, Anthony Pickering, is mentioned in the survey as having 16¼ acres "of which the sea has

[a] See the satirical account of this attempt in *Archaeologia*, xxxv.

worn away 5 acres." The site of the Old Castle of Sandgate with 84 acres of land and a conigree of 3 acres was held by Robert Lambert. These were both in the plot of 175 acres north of the New River and west of the New Letten Ground as the plot of 119 acres was called. "The walls of a ruinous chapel," probably the old church of Sandgate situated east of the road to Causie and south of Sandgate Street, were held by Anthony Pickering. The total rent of Sandgate according to the survey was 71*l.* 9*s.* 5*d.*, and the extent 2,820 acres.

Sandingfield, now and before 1556 called by the French St. Inglevert, is a curious instance of the English name more closely resembling the original one than that given by the French. Santingheveldt was, according to M. Haignère, the original name, though having nothing to do with the nature of the soil, there being as he remarks no sand there. In 1116 Oilard is said to have founded the hospital there, the Lazar House of the older maps. It was close to this place that in 1389 and 1390 were held the famous tournaments of St. Inglevert described by Froissart and so exquisitely represented, though with fifteenth century costume, in the Arsenal copy of those chronicles. Edward III. does not seem to have interfered with the hospital, but in 1445 Henry VI. appointed the duke of Buckingham, then governor of Calais, to examine the accounts of the hospital, though the district then and afterwards was claimed to be neutral territory. In 1556 before the survey was made, it is noted in State correspondence of January 21 that the house lay within the English Pale, the real frontier being "a large English mile beyond it." Whether the place was neutral territory or not, Henry VIII. considered it as belonging to the English, and complaints having been made in 1535 by John Cokeson, water-bailiff of Calais, that "they used to feed harlottes and enemies, exiling from them all Englishmen, for they abhorred all Englishmen and said they held of the Pope," in 1541 the Commissioners who were to survey the Mainbroke also received instructions to inquire into the circumstances connected with Sandingfield and to report to the king. (See letter in note.)[a]

[a] Henry VIII. to Maltravers, &c.

8th Sept. 1541.

"And where as the house of Sandingfield, standing holly within the Kinges Majestes pales, hathe also moche lande in the same, and that the Master therof hathe nevertheles hitherto litle knowleaged his dieuty towardes His Majeste, but rather claymed himself to be newter, and an appendant of the Bisshop of Rome; His Highnes, not being mynded yet to ministre any cause of pike by his sodain apprehension and punishment, hath thoughte good to sende for him hither, as it were to knowe his advese in suche thinges, as His Grace entendeth to doo there for the benefite of his marches, as by the copie of the letters which the said Commissioners shal receive herwith, together with the same letters to be delyvered, they shall perceyve. Wherfor His Majestie woll,

Even in 1560 when the French Commissioners visited the place to parcel out the newly acquired territory, the head of the house claimed to hold direct from the pope.

The present church is said to be part of the old hospital.

In the survey of 1556 Sandingfield is not described nor are any tenants mentioned.

Soules, now Escalles, is mentioned in 844 in a charter of St. Bertin as Scala. Its present extent appears to be about the same as in the survey. It was bounded by the parish of Sandgate on the north, and at a short distance from the sea this bound ran by Howberg, a hill shown on the modern map near Blanc Nez as a survey station with an altitude of 134 metres. In the survey the bearing of Dover Castle from this point is given as north-west by west one-quarter west. The eastern boundary was the parish of Peplinge down to the borders of Bennynges which continued the limit as far as Rannies Holt on the edge of Herwellingen parish, which formed the western limit of Scales as it appears in the English days to have stretched to the sea. In this parish there were several roads, such as from Scales to Calais, Scales to Guines, and Scales to Sandgate, which started from Whitsand. Another road was that from Fel Emprise to Calais. This Fel Emprise is still in the map. Rannies Holt now appears as Ramessent, which in a charter of Guines of 1,220 acres was then called Ramessent. The Mount Peter, often mentioned in the survey, does not appear in the modern map but was probably the high ground on the south of the parish marked with altitude of 156 metres. This was on the Picardy Encroachment Pale. In the south of the parish were Scales Common and the Queen's Drives and waste grounds. Scales was in early times a rival to Calais, but Edward III.'s occupation of the latter town and the establishment of the Staple reduced it to an unimportant position, though it gave a title to the lord Scales of England.

According to the survey the extent of the parish was 1,324 acres besides waste lands and the rent was 9*li.* 14*s.* 2½*d.* When the French Commissioners visited the parish in 1560 they reported that they found it uninhabited. The church, dedicated to St. Maxime, was not built till 1607.

that the said Commissioners shall name the said bounds to be delivered unto him in good writing: and he shall thereupon retire to some town, they shall then sit during the Majesty of the same, and two of the wardes and bounds next to the delivery, to name the names of them. And if he said some over according to the Kinges commandement limited, then in his presence they shall severally view his bounds, as they shall see the case, and severally allot and divide the same as they shall see the case, to thintent they may make their bokes the more perfite accordingly."

In the survey the following plots are mentioned, with others. One of 500 acres abutting on the Pale and between the sea and the way from Scales to Sandgate. East of this was one of 400 acres abutting on Sandgate and Pepling. To the south of this were two of 100 and 101 acres respectively on the south and north sides of the road from Scales to Guînes and having the way from Fol Emprise to Calais as a southern limit. South of this way were plots of 150 and 60 acres, the former abutting on Hervelingen, the latter on Pepling. The Queen's Drises, or waste grounds, abutted on the Pale and Hervelingen.

Spellac, or St. Quentin, no longer exists as a parish nor do either of the names appear on the modern map. Its position is not very clearly defined but it occupied certainly part of the modern parish of Guînes, and perhaps also part of the Andren of to-day. Its boundary was, on the north-west, Guînes, from which it was divided at the Pale by Rue des Pierres or Stony Street. The boundary then ran north-north-east to the river from Newenham Bridge which formed the northern limit. From the river the eastern boundary ran south-south-west to the Pale, separating the parish from Andren by the Morrel Way as far as the Boar or Bear Way. Thence the Morrel Way continued to Fink's or Vink's Valley which at the Pale divided Spellac from Camp. The extent of the parish was 1,070 acres and the total rent 24*l.* 15*s.* $2\frac{3}{4}d.$ About five-twelfths of the parish consisted of wood and waste land. Spellac was crossed by the road from Guînes to Andren, the Ewlin Way, the Boar or Bear Way, and a way from Hawtingham to Camp. Hawtingham, though mentioned in the survey as one end of this way, does not appear in the modern map nor in any old one yet seen, but was apparently not far from the Fours à Chaux, or limekilns of the French map of to-day. The Butter Way and Wood Way are also mentioned in the survey, but have not been identified. Hugh Giles held $19\frac{1}{4}$ acres called the Morells, probably like the way of the same name so styled from the wild cherry trees. The same also held 13 acres called the Baranerye on the borders of Guînes, with the Butter Way to the north and the Wood Way to the south. In the southern part of the parish were the Rigalls, a wood of 50 acres held by M. Franks and abutting on Camp. South still of these the way from Hawtingham to Camp separated the Queen's woods of 147 acres and the Queen's drises or wasteland of 57 acres from the rest of the parish; the drises, which were also called the Nonnes Drises, were parted from the woods, also called Hawtingham Woods, by Swinetrough or Park Valley. This name occurs in the survey and in M. Pigault l'Espinoy's map. In this last Vink's Valley has been transcribed wrongly as Valle dite Vike. None of these names appear in modern maps.

In the survey the plots are thus described. Commencing at the Pale a plot of 200 acres stretching across the parish extended northward to Hawtingham Way to Camp, northward of which another of 240 acres extended to the arable land from which it was divided by the Boar Way. The next plot of 300 acres reached to the Ewlin Way above which one of 90 acres extended to Guînes Way to Andren. Between this and fishery was a plot of 240 acres.

In 1515 Hugh Hanley was presented to the church of Spilake, vice Hugh Park, deceased. (Rymer.)

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## APPENDIX I.

### Casualties of Mark and Oye.

The pr°ffitt of fowling wi^t^in the sayd Lordshippes of Marke and Oye.

By the p̄sentment of the sworne men of the sayd Lordshippes before S^r^ John Dauncey and other Commissioners there the Monthe of September Anno xviij^no^ R.Rs Henrie VIII^vo^ It appearethe that Straungers whyche come into ffowle paye v^s^ gr. for the Season every one.

The ffyshing of all the Ryvers Watergainges Sewers Dykes and Plasshes wythein the sayd Lordshippes.

The same hathe been wonte to be letten and so charged by p̄cedent Rentalls at xiij^li^ gr. p Annum and sythens the xxix^th^ yeare of the Reigne of the late Kinge Henrie theyght Reigne the ffree men of Marke and Oye by p̄tence of a graunte from the sayd kinge upon condicon of the diginge of the haven & holled have enioyed the same. W^t^out Rent payed.

The towle dewe of all sorte of Marchandyze Ware or Cattall ffrutes of the Countrey, as well at the Slewce of Oye by land over the brydge there as also at the Haven bridge throughe Olderkyrke, wythe Wagon Carte or Horslode, or Catall dryveinge and thys accustomed to be gathered by the Toller at Oye Slewce, ffyrst ought to be taken of everye Sarplar, Woole or poke or poket being Staple ware bothe at Marke and also at Oye in everye of the sayd Tolle places for every balle or Coyte of the sayd Sarplar or poke o̅b̅ that ys the Sarplar iiij^d^ gr. Itm̄ of everye C^th^ of Woolle fleeses so it be shorne w^t^in thys Lordshypp of Marke & Oye iiij^d^ gr. Itm̄ yf it be caryed owte of thes Lordshypp to be solde the Marchannte and owner owethe nothynge tylle he come agayne. Itm̄ yf he brynge hys Woolle agayne unsolde, then shall he paye nothynge, but alwaye at goinge forthe he ought to set pledge for the Tolle. Itm̄ of a hundrethe

Shepe goinge into thes lordshyppes to be sett to pasture after—a quarter a pece that ys the hundrethe ij$^{s}$ j$^{d}$ gr. Itm̄ yf the Marchannte or owner take them owte agayne after the greasinge tyme not solde w$^{t}$oute frawde couller or Guile, but they beinge styll hys owne good, and none other mans, then he to paye nothinge, but the Toller maye putt hym to a booke othe. Itm̄ of a hundrethe shepe Skynnes cōinge through thes Lordshypps beinge no Staple Ware to paye iiij$^{d}$ gr. Itm̄ in lyke wyse at Marke yf they passe that waye iiij$^{d}$ gr. Itm̄ of evry Horse Mare or gelding solde owte of thes Lordshypps muste paye for everye foote j$^{d}$ that is iiij$^{d}$ gr. Itm̄ if he be a rode horse he must paye for everye foot ij$^{d}$ that is viij$^{d}$ gr. Itm̄ ther is dewe for evrye Englyssh Bullock passinge owte of England and so throughe these Lordshyppes ij$^{d}$ gr. Itm̄ of everye other Horne Beast Oxe or Cowe on thys side the See bred, and brought up, of a pece of them j$^{d}$ gr. Itm̄ lykewyse at Marke yf theye passe that waye. Itm̄ of everye packe of Ware or Marchandyze goinge owtewarde must be taken iiij$^{d}$ gr. Itm̄ of everye longe carte or Wagon loden wythe goodes, or merchaundise owte of Oye Slewce, or on the Slewce banke iiij$^{d}$ gr. Itm there is dewe of everye Shyppe laden wythe goodes or Merchaundyze goinge throughe the Slewce outwardes & inwards to the kinge iiij$^{d}$ gr. Itm̄ of Scewe laden iij$^{d}$. Itm̄ of a Bakeboge ij$^{d}$ gr. Itm̄ of a Bote j$^{d}$ gr. There is dewe of everye Crosse Sacke laden on a longe Carte iij$^{d}$ ob. gr. Itm̄. of everye hundrethe of Englisshe Shepe going owte of England & so passinge throughe the Lordshyppe of Oye into fflaunders, or Pycardye, for Shepe or mutton . ob̄ . gr . that is for everye hundrethe of Englisshe Shepe iiij$^{s}$ ij$^{d}$ gr. Itm̄ yf he bringe the sayd Shepe through Marke he must in lyke case paye yf they passe that waye. Itm̄ there is dewe to the Kinge of everye Catchemare laden and goinge owte of ye lande j$^{d}$ gr. Itm̄ of everye Catchemare laden & cōinge into the land the kinges Tolle is but ob̄ gr. Itm̄ there is dewe of everye Razer of Wheate Rye Beanes or Rape seede laden w$^{t}$in the Lordshyppe of Oye and goinge forthe into fflanders or Picardye ob̄ gr. Itm̄ of everye Razer of Barleye or Otes laden wythein the sayd Lordshipps of Marke and Oye and so passing owte into fflaunders or Picardye ob̄ gr. Itm̄ there is dewe to the Kinge for hys Tolle of everye longe Carte laden w$^{t}$ ffyshe owtwardes into fflaunders or Pycardye iiij$^{d}$ gr. Itm̄ for everye Shorte Carte so laden owtwards ij$^{d}$ gr. Itm̄ for everye horse burden so laden wythe ffysshe owtwardes j$^{d}$ gr. Itm̄ there is dewe to the Kinge of everye Jeweller carriing or beringe of any footepacke inwardes whearein are Jewelles as Golde or Sylver Broches Stones or anye Ringes Oytches or suche lyke wrought vj$^{d}$ gr. Itm̄ yf the sayd Jeweller paye cōing inwardes he shall paye owtwardes n$^{l}$. Itm̄ ther is dewe for everye pedler beringe a foote packe for inwardes and outwardes j$^{d}$ gr. Itm̄ for evrye Marchauntes packe or in pypes or in Barrells, in Canvas mayles w$^{t}$ ropes: or in Maundes cōing inwardes on Cartes ij$^{d}$ gr. Itm̄ of everye pype of Wyne inwardes and outwardes ij$^{d}$. Itm̄ of everye Barrelle of Rape Oyle j$^{d}$. Itm̄ of a Barrell of pytche ob̄. Itm̄ of a Barrell of Tarre qr. Itm̄ of a pype of bere or ale j$^{d}$. Itm̄ of a Razer of Salte q$^{a}$. Itm̄ of a Chalder of Coles ij$^{d}$. Itm̄ of a Barrell of honnye ij$^{d}$. Itm̄ of a Cake of Waxe ij$^{d}$. Itm̄ of a Cake of Tallow ij$^{d}$. Itm̄ of a Tyne of Butter j$^{d}$. Itm̄ of a Butterpott of x Stone ob̄. Itm̄ of everye sacke of Hoppes ij$^{d}$. Itm̄ of everye pooke of Hoppes j$^{d}$. Itm̄ of a Hundrethe of yron j$^{d}$. Itm̄ of a pype of Woode ij$^{d}$. Itm̄ of a Barrell of Osmondes j$^{d}$. Itm̄ of a Bale of Madder j$^{d}$. Itm̄ of a Bale of peper ginger or Synamon vj$^{d}$. Itm̄ of a Bale of Almons iiij$^{d}$. Itm̄ of a Barrell of oyle olyve j$^{d}$. Itm̄ of everye Catchmare laden wythe lynen clothe for everye

packe ij$^{d}$. Itm̄ of a Bale of Ryse ij$^{d}$. Itm̄ of a Bale of Graynes vj$^{d}$. Itm̄ of a Barrell of Sope j$^{d}$. Itm̄ of a ffodder of leade xij$^{d}$. Itm̄ of a hundreth of blacke tynne j$^{d}$. Itm̄ of a Saddell j$^{d}$. Itm̄ of a horse coller or gherell ob̄. Itm̄ of a bagge of Saffron vj$^{d}$. Itm̄ of a ffrayle of ffigges or Raysons ob̄. Itm̄ of a Rawe hyde of Englande j$^{d}$. Itm̄ of a Rawe hyde of thys countrey ob̄. Itm̄ of a dycker of hydes tanned ten hydes a dyker ij$^{d}$. Itm̄ of a hundrethe of Calve Skynnes j$^{d}$. Itm̄ of a dosynne of Cordwayne Skynnes j$^{d}$. Itm̄ of a dosyne of Sprutce Skynnes ij$^{d}$. Itm̄ of a Stone of ffethers wythe owte Tyke j$^{d}$. Itm̄ of a wat$^{r}$ Bote w$^{t}$ ffyssche j$^{d}$. Itm̄ of a Barrell of Elys j$^{d}$. Itm̄ of everye small pott of Butter under tenne Stone q$^{a}$. Itm̄ of a barrell of Sam̄on j$^{d}$. Itm̄ of a barrell of Herringes owtwardes and the same inwardes ob̄. Itm̄ of a dosynne Maundes baskettes ffannes or Syves ob̄. Itm̄ of a baskett full of bowles ladells or such other j$^{d}$. Itm̄ of a hundrethe of Salt ffysshe j$^{d}$ ob̄. Itm̄ of a pype of redd Herring iij. Itm̄ of a thousand ffresshe Herrings ij$^{d}$. Itm̄ of everye Catchmare laden w$^{t}$ ffresshe Herrings j$^{d}$. Itm̄ of everye packe of Brekeling ij. Itm̄ of everye sacke of Brekeling j$^{d}$. Itm̄ of everye Hundrethe of ffelles Staple ware vj$^{d}$. Itm̄ of a gybbe of Wollen clothe outwardes ij$^{d}$. Itm̄ of a great maunde of marcerye ware ij$^{d}$. Itm̄ of everye coste marye w$^{t}$ ffrute inwardes ob̄. Itm̄ of everye greate frute maunde ob̄. Itm̄ of Onyons ob̄. Itm̄ of everye carte or Bote laden w$^{t}$ Pottes or Tyles iiij$^{d}$. Itm̄ of everye bote laden w$^{t}$ faggotts Wood or Byllett j$^{d}$.

And genrallye all manner of goodes or marchaundyse passenge Oye Sluce or under Oye Sluce ought to paye ther duytye & tolle here at Oye Sluce and in no place ells. And as well those that passe at the Haven bridge throughe Olderkirke and Harrway wythe the Wagon Carte or horse lode or Cattall dryving they must paye to the sayd Tolner of Oye Shire because it is letten in one fferme, provided that no ffreman name ne ffather any other mans goodes, under couler of his own goodes in deffrawdinge and desceyving the King of his Droytes and Tolles. In payne to have the same goodes ceased as confuscate, and he to be depryved from his ffreedome for ever. Whyche agreeth word by word w$^{t}$ the olde ingrossement of the sayde Rates remayning w$^{t}$ the ffre men of the sayd Lordshypps whiche hath ben ffyxede upon a table to remayne of Recorde.

The same hathe ben Wonte to be lette and so charged by p̄sedent Rentals at C$^{s}$ gr. p annū : aud sythens the xxix$^{th}$ yere of the Reigne of the late kinge Henrie theight the ffree men of Marke and Oye by p$^{r}$tenco of a graunte from the sayde kinge upon condicon of the diginge of the haven and the holled have enioyed the same w$^{t}$houte anye rent payed : Neverthelesse the same graunt was never of fforce beinge but onlye signifyed by Cromwells Lr̃es then Secretarie and no Lr̃es patentes passed accordinglye nor no bondes taken, accordinge to the purporte of the lr̃es nor the other condicon onlye obs̄ved. And the informacon whereon the Graunt gounded being untrew for that the diginge of the sayd Revers was ther own dewetie before ; and therfor the sayd Tolles & ffishinge are clere the quenes Ma$^{ies}$ being worth as they have lett owte the same, viz. the Tolle vj$^{li}$ xvj$^{s}$ x$^{d}$ gr. the ffisshinge xix$^{li}$ iij$^{s}$ j$^{d}$ gr.

# APPENDIX II.

## Customs of the Pale.

Also if ther be anie ꝑsonne or ꝑsonnes passinge throw the Lordship of Marke and Oye into fflanders or Brabande or elles into anie other ꝑtis havenge anie sterlinge monie golde or silver Bolion Juells or Stonis about him or upon him beinge owte of syghte or on his hands Rings or chaines aboute his necke that be not in sighte, to be forfett to the king excepte he have the kings licens. And if so be that he hath Chaines aboute his necke and Ringes on his ffingers and thoughe he have them openlie in sight and the Sercher ꝑceave it passeth his abilitie and power sutch juells to wear or beare, the Sercher shall take them from him and ꝑsent it to the baillie or Receav$^{or}$ and as they finde the cause so to order it Provided allway if ther be anie personne Englishe man or other inhabitant w$^{t}$in the kings dominion that will carrie anie Bollion or plate for to make it new in anie straunge countrie he shall bringe the same unto the Receav$^{r}$ to thintente he may knowe what Bolion or plate it is. And the saide ꝑsonne shall bind himself ether by suretie or obligation to bringe the saide plate as shalbe apointed what day and time and take a bille of the Receivo$^{r}$s hand to the Sercher of the some of the plate or bollion and that bill shalbe alwaies a dischardge for the Sercher.

Decred by Commission remaininge of record in Thexcheker of Callis anno ij$^{do}$ R.Rs H viij$^{vi}$. Everie confirmaton alienaton and transmutaton of possessons of enie lands holden of the kinge in cheefe shall paye to the kinge after the rate of ij$^{d}$ everie acre. Also if ther be anie psonne that sellethe or alienethe his betterings to anie other psonne so it be on the kings land ought to pay to the kinge the v$^{th}$ pennie. That of v$^{s}$ xij$^{d}$ of v$^{li}$ xx$^{s}$ et sic de similibus. But if it be free lande wherein such betterings stode is made then the amũte must be paied vnto the freeman owner of the sayde free land for so much as the betterings is solde after the saide rate. Also Betterings of land is firste housinge to be praysed by the swo$^{r}$ne praysers, also plants and treese praised by the saide praisers. Also dikes, quickesett hedges, Settinge of turfe and all suche like to be praised by the kings praisers. And if the dikes bene dolven by the Rodd at vj$^{d}$ or vij$^{d}$ the Rodd whether it be more some or lesse some for everie yere that he occupiethe after the dikes so dolven and cast, to minishe everie yere j$^{d}$ unto the time that his betterings of such dikenge be owte or Runuppe. And if the ffermer lett anie fallowe lienge, for that yere that it so lieth fallow he that entrethe shall paye that yeres rent for asmoche fallow as so lieth. And if the ffermer plowe the fallowe three times as is accustomed then shall the new tenânt that entrethe paye for the firste plowinge xvj$^{d}$, the seconde plowinge xx$^{d}$, the third plowinge ij$^{s}$. And if he dunge it w$^{t}$ parkinge of shepe or of Bests, he to have ij$^{s}$ viij$^{d}$ for evry acre. If he dunge it w$^{t}$ the Carte, he to have iiij$^{s}$ of an acre. And if it fortune the said fermo$^{r}$ to have cropp then shall he be minished of his betterings the laste plowinge which is ij$^{s}$. And the third ꝑte of the dunginge if it be Carte it is

xvj$^{d}$ if it be w$^{t}$ the ffolde it is x$^{d}$ ob. If he have no cropps so muste he minishe the seconde forrowe w$^{ch}$ is xx$^{d}$. And the seconde ꝑte of the dunginge w$^{ch}$ is w$^{t}$ the carte ij$^{s}$. And if it be with the ffolde x$^{d}$ ob. And if he have the thirde Croppe then must he minishe the firste plowinge xvj$^{d}$ and the thirde ꝑte of dunginge w$^{t}$ the cart xvj$^{d}$ and w$^{t}$ the folde x$^{d}$ ob and then is his Betteringes all owte of that land so bettred.

Also if anie manner of Straunger dep$^{te}$ the countrie he must paye to the kinge for all manner of suche goods as he carrethe w$^{t}$out the lande the v$^{th}$ pennie of his goods for the quinte.

Also if ther be anie manner of ꝑsonne finding anie manner of Straye as Horse Mare Cowe or Calfe or anie other beste he muste ꝑsent it to the bailliue or S$^{r}$geant that dwellethe w$^{t}$in the same ꝑishe ther as the saide Straie was founde. Ther is to be ꝓclaimed in all ꝑishe churches w$^{t}$in the saide Lordships and so the straie he be kepte a twelve moneth and a daye. And if anie ꝑsonne come and challenge the saide straie w$^{t}$in the foresaide time bringinge due proof it to be his he to have it againe he payenge Costs and chargs. If it be not challenged w$^{t}$in the saide time that then the saide Straie to be solde before the churche by an officer and so the money to be ꝑsented to the King's Receavo$^{r}$ and the seide officer shall have xij$^{d}$ of the pounde so by him ꝑsented.

Also if anie ꝑsonne or ꝑsonnes fortune to make anie fraie and drawe the anie bloode they to forfet unto the Kinge x$^{s}$ g$^{r}$. If it be in the moneth or time of harveste or elles in the time of the free faire w$^{ch}$ continueth by the space of ix dayes forfetteth unto the kinge xxv$^{s}$ gr.

Also if it fortune anie ꝑsonne or ꝑsonnes to be maimed he that is caste by the lawe in the fawte forfeitethe c$^{s}$ gr.

Also if it fortune anie ꝑsonne or ꝑsonnes to commit either treason murder fellonne or crime if he be condempned by the Lawe, the seide transgressor to forfet his lief & goodes under this manner. If he have a wief and children the kinge to have the third ꝑte of the goodis. If he have a wief and no children the kinge to have the one halfe and the wief thother. If he have neither wief nor childe the kinge to have the hole goods. Also he shall forfet to the kinge all his terres and tenem̄ts except the Betterings therof. That is to saie new buildings of houses repracons of houses and plantinge of treese made by the same man condempned wherby thinheritaunce is amendid w$^{ch}$ Betterings shalbe valued and the vallewe therof shall be divided betweene the kinge and the wief and Children or otherwaies as is aforsaide of goods.

And if ther be anie ꝑsonne that killeth himselfe willfullie he shalbe sit upon w$^{t}$ the Kinges Crowner and freemen of the Curt benche w$^{ch}$ be in number xij beside the Croner & vij Escheuins w$^{ch}$ settethe upon the other benche upon terres and tenemts and other accions. And when anie sentence shalbe geven upon a mans lief so shalbe bothe the benches be full w$^{ch}$ is in number xx ꝑsons besides the bailliue. And the kinge shall have his goods after like manner or porcon as is beforesaide.

Alsoe if ther be anie ꝑsonne killed w$^{th}$ a horse or a beste it is forfaited to the kinge so that it be not in the mans defalte and so iudged by the lawe.

Also if anie manner of Banlinge com̄e owte of anie Staunge princis land either for murder ffellonie or Crime and so entre into the Lordships of Marke and Oye he muste ꝑsente himselfe to the Baillie or to sum other S$^{r}$geant of the saide Lo$^{r}$dships so w$^{t}$in thre daies after his firste entrie and declare to the Baillui the cause of the comming and his offences what he hathe done and the

Baillie to geve him a Ghallaie and savegarde for a reasonable fine after as he is able to paye or bere. And also to sett sufficiente suretie that he shalbe that he shalbe of a good abearinge. And if he can finde no suretie so shall he be commaunded upon paine of deathe for to be of a good abearinge. And if he ꝑsume to come w$^{t}$in the Lordship of and remaine theare thre dayes w$^{t}$oute gevinge knolledge to the bailliu or anie manne for him, then he to be tached on suspecions and examined from whens he is and from what cause he is fled owte of his owne cuntrie and so the cause known whether it be fellonie murder or Crime. If the ptie will sue him by the Lawe he to suffer peinie accordinge to his desyrvinge. And if the ꝑties will not sue him, if the Lorde will not sende for him wheras he did the offence he shalbe delivered to the Lorde by a letter of renvoye to thentente that right and justice maie be ministred.

Also it is by Kinge Henrie the vij$^{th}$ decreed the xviij$^{th}$ yere of his reigne that no alien straunger borne beare anie office or Rule in anie wise conserning the Lawes and Revenues of the saide towne and m̄ches of Callis afore theie have continued Englishe by thre discents accordinge to the decrees by the said kinge made at Callis in the xv$^{th}$ yere of his reigne upon paine that such as ellecte or amit him to the contrare thereof shall forfet to the kinge c$^{li}$ st. as often as theie offende in that behalfe and the Alien ellecte or admitted to have all his lands tenem̄ts reversions rents srvices goods and Cattell seased into o$^{r}$ handes and his ꝑsonne to be bannished out of the saide towne and m̄ches for ever.

And if anie housinge be builded by anie Alien upon anie grounde holden by the saide kinge in chiefe or elles anie Englishemanne builde anie housinge and lettithe the same to a Straunger for anie more than a yere w$^{t}$out licens bothe the buildinge and grounde shalbe seased into o$^{r}$ handes and holden at o$^{r}$ wille and all suche lands and goods and Cattell as shalbe founde in the hands of ffeoffs or other ꝑsonnes or of anie other ꝑsonne havinge no right to thentente to put the seide Kinge from his right and put in truste to the behove of anie alien straunger therof, all suche as have occupied or hereafter shalbe occupied and holden of the seide kinge in chief by anie ꝑsonne w$^{t}$out rent or Service and all suche as have bene or now be or hereafter shalbe founden in handes or possession of anie ꝑsonne by anie ffeoffm̄t gifte Coler Cawtile or Covn̄t to the behove of anie Alien afore he was made denison, and all suche as have bene or hereafter shalbe approved into mortmaine unto anie Abbie Collage Hospitall Churche Chappell Crafte or office corporate ffraternitie or other ꝑpetuitie w$^{t}$oute the saide kings speciall licens under the greate seale of Englande, the seide ffeofment anie other Colo$^{r}$ Cawtell or Covin in the same made notwithstandinge shalbe seased into the kinges hands and all suche ꝑties as have occupied anie of the same theire heires or assignes shalbe distreined by theire possessions and goods to satesfie the kinge and his heirs of all the arrerage of the revenues and ꝑfitts that have commin and growen of them by all the time that they have bene so aliened and consealed and wrongfullie occupied. And all ꝑprests and ꝑprestures and all such Landes tēn̄tes reversions rents servics and Cattell as were or herafter shalbe founde belonginge to any trato$^{r}$s rebells fellons outlawed ꝑsonnes intestate aliens depted w$^{t}$out o$^{r}$ licens and deodands aliens depted and of such aliens as convey theire goods and Cattell w$^{t}$out o$^{r}$ licens owte of o$^{r}$ saide towne and m̄ches of Calleis unto outher Countries not belonginge under the king's obeisance and therwith the same do builde and ꝑchase shalbe seased into the king's hands and holden at the king's will and that all manner forfeits and ffines that shall

fall w^t^in the saide towne and m̄ches by reason of breaking anie Acte statute or ordñnce decre restrainte or pclamation made or to be made in the king's name shall come holie to his pfit and advauntage. And that all the king's iudicate officers of the towne and m̄ches of Callis shall kepe theire courtes as there have been accustomed in everie iiij termes of the yere and suffer no accion to depte unsentenced before them above iij sises or above one yere at the moste for a great and a notable Consideracon w^t^oute the Kings consente and warrante upon paine of m^l^ markes to the kinge and amendes to the ptie grevid by triplage damage, and that they geve no wrongfull sentence that can be pved upon paine of another m^l^ marks to satesfie the partie wronged of his damage by triplage freholdurs dammage. And that all suche as holde of the kings ma^tie^ and his heires anie lands or tenements by homage ffeawte or releif and entrethe the same after the dissease of his aunsestre w^t^oute interest by geven by the Kings officers unto him of and in the same and that he have dated his homage and feawte and contente his relief The seide lands shalbe seased into the kings handes unto that theie have ffined w^t^ him for theire trespas. Also it is decreed that if anie manner testament of anie psonne diseased there w^t^in viij dayes nexte after it to be pved, all manner transmutacons estates liverie seasons and possessions of anie manner Lande possessions or reversions gevin actions sentenced in anie courte of the saide towne and marches or elles any graunts or leases made by the Kings Ma^teis^ Threr of Callis under the kings seale beinge in his kepinge be not put in remembrance in theschevinie at Callis by the king's Clarke of Comission and recorde whom the king hath admitted in that behalfe to be a remembraunce w^t^in viij dayes then nexte ensuinge, So that it maie be knowen whether the Kinge be entitwled unto anie thinge concerninge the same upon paine to have all the Lands tent^s^ goods and Cattell belonginge or in anie wise towchinge the same to be seased into the kings hands and all the said testaments transmutations estates Liverie seasons and possessions to be voide and of none effect or strengthe, So that the kings Clarke of Commissions and remembraunce maye kepe a pfet rentall of all the kings lands tenements and s̄vices unto the king belonginge w^t^in the saide towne and m̄ches of Callis and therfore yerelie unto the kinge to yelde accompte. And forasmoche as the king is crediblie enformed that the Maio^r^ aldermen and burges of the towne of Callis and the baillie and fremen of the Scunage therof and isle of Colham have occupied aliened and concealed and yet doe occupie aliene Conceale and by theire supportaton and maintenñnce manie alien straungers occupie alien and conceale manie lands tent^s^ rents svices goods and Cattell from us wherunto the kinge is rightfullie entitled contrarie to the Lawes statutes decrees and laudable customes ther used by time owte of minde, and wolde not suffer the king's Leveteñnt w^t^other the kings commissione^r^s at Callis to here examine and determine the Kings right and title of and in the same accordinge to the te^r^ms of the Kings Comission unto them in that ptie directed, answeringe them that the Kinge and his pgenitors late Kinges of England have graunted them suche ffraunches℘ previleg℘ and Liberties by Charter that none of the kings commission^r^s shall examine anie suche Consealemts and defaults betwixte the Kinge and his subiects there, but themselves, and by colo^r^ thereof theire wolde be Judge of theire owne Consealemets and defawlts, and disherite and put the Kinge and his naturall subiects Englishe there dwellinge from theire Right. The Kings ma^tie^ therfore by the advice of his Counsell hathe decreed and adiugd that it shalbe lawfull unto the seide Commissioners The Threr and Comptroller in theire absence and theire successors at all times to empanell a queste

w^t^oute ꝑtialitie or maintenance or as manie Enquests of the Kings naturall subiects Englishe borne there inhabited indiferently chosen, as shalbe thought necessarie by theire discretions like as the commissioners of the Kinges ꝑgenitors Kings of Englande hathe evermore done in time passed, to enquire examine determine and geve sentence by verdite unto them of all manner like conseal-ments and defauts committed or in time to come to be co̅mitted by anie Maio^r^ alderman burges bailif or ffremen or inhabitaunts of the saide towne and m̃ches of Callis w^t^out anie interuption lettinge or agenste the saienge of them or of anie of them upon paine of forfeighture of theire saide ffraunchesis p^r^ivlegis and Liberties and theire bodies and goods to stande at the will and plesh^r^ of the Kings Ma^tie^ and his heires.

Also that no ꝑson or Straunger man nor woman to take upon them to marrie w^t^ anie Englishe parsonne unto the time that they have fined w^t^ the Baillie for the kinge soche a some as the Baillie thinkethe resonable for him And that no preste ꝑsume to marie w^t^ none suche w^t^oute licens of the baillie upon paine that will faule thereof.

Also that no maner of man hunte in the King's warren by night w^t^ no haie nor ffuret upon paine of fforfettinge C^s^ gr. and if anie man kill anie Connie withe Crosse bowe or longe bowe or anie other meanis he to forfet to the kinge X^s^ gr.

Also that no manner of man w^t^oute the Lordship shall not foule w^t^in the Lordship w^t^out he agre w^t^ the Baillie.

Also if ther he anie Rialtie taken as ffawcons hertes hindes wilde Swannes bredinge theye muste be ꝑsented to the Baillie for the king. And the seide Baillie shall geve them that brought them a resonable rewarde.

Also if ther be anie fishe Roiall founde apon the sondes the Kinge to have thone halfe and the ffinder thother halfe. And if ther be anie fishe Roiall taken in the Sea w^t^ net or ginne and broughte to be solde or Cutt the Baillie shall have the hed of the seide ffishe for his ffee.

Also if ther be anie ship co̅minge into the Newe Haven or in anie place upon the shore w^t^in the Lordship of Marke and Oye and remaine theare two tides he must paye for Ancorage ij^s^ st.

Also if ther be anie manner of ship driven to lande w^t^ anie marchaundise outher by storme or by men of warr or elles by anie other chaunce if the owner or maister come to the shore there for socor of them and theire goods Then to co̅me to the Officer Sergeante of the parrishe desiringe them of Soco^r^ and helpe, So shall the officers reise cuntrie w^t^ men and Cartes and save the goods as moche as maye be. And the Kinge to have for the savinge C^s^ st. And the officers bound to kepe the goods to the use and ꝑfett of the m̃chaunte that the seide m̃chaundise be not purloined or stolen. And the m̃chaunt shall paye all such labo^r^ers laboringe to save the seid goods.

Also if ther be anie manner of Wracke found by the sea coste it muste be ꝑsented to the Lagander or to the Sergeante. And soe takine upp broughte to the foresaide Lagander's hous by the baillie and Receivo^r^ and Invitoried.

If it besoche m̃chaundise that maye be kepte kepe (*sic*) it if not the saide goods to be solde And if ther co̅me anie ꝑsonne or ꝑsonnes w^t^in xij monethe and a daye that will challenge the seide goods making due profe to be theirs, their goods or monnie to be restored to them againe payenge to the Kinge C^s^ st. for a reskewe And also to paye all soche costs and chargs as hathe bene laide owte for the same.

Also if anie psonne dothe finde and take anie wrak rivinge or drivinge in the sea w^t^out the Lowe water marke and dothe save it and bringe it on Lande the king shall have the one halfe and the saver to have thother halfe.

Also if anie Lands fawle into the Kings hands by faute of paymente ffellonie or Crime that then the seide Lands shalbe pclamed in everie pishe churche w^t^in the Lordship. And he that offerethe most monie for it shall have yt to the Kings advntage. And to be entred into the Kings booke as his teñūt. And the Receivo^r^ shall have xii^d^ gr. for his entringe.

Also if ther be anie manner of straunger borne w^ch^ hathe anie Kings lands in fferme. And if anie Englyshe mañe wilbe disposed to have his ferme let him speake to the Receavo^r^ of the same gevinge the Stranger his betterings w^t^ halfe a yeres warninge So shall the Straunger depte from it and the other to entre in howbeat the seid Straunger muste have his Betterings er he depte from the place or elles the englyshemanne shall agre w^t^ him for the Betterings. And in this case the Straunger sholde paye no quinte because he deptethe agenste agenste (*sic*) his will.

Also all manner of Straungers that biethe anie shepe w^t^in the Lordship of m̃ke and Oye so ther be an hundrethe or above in the folde, the Baillie muste have of everie ffolde one of the beste shepe soe that it be no bell weather. And if ther be L shepe then the Baillive to have a lambe. And then the Baillie is bounde to hunt the wolfe ones a yere if it be nedefull.

Also all manner ffines of ffraies at v^s^ gr. and botes and fforfeitures at v^s^ gr. and under v^s^ gr. made w^t^in the saide Lordships contrarie to the pclamations and ordinūcę, of the same appertaine to the Lawe of m̃ke for the maintenūce of the co^r^te of the same.

## APPENDIX III.

### Tolls &c. of the Scunnage.

The ffysshery of the Plasshe and Slewyces at newnham bridg which the Threr pretendyth to have belongyng to his office nowe resting upon Tryall whether the same ev$^{r}$ passed to any of his p̄decessors by especiall grant annexing the same unto the sayd office or no, the same ys letten fourth by hym for the yerely rent of n$^{l}$.

The ffyshery of the newe Ryv̄ commyng from Colham to Calles Dytches the lettyng wherof the high M$^{r}$ shall hath hadd syns the newe Ryv̄ was made and hath letten the same to Coone Launce taking of him half the ffysshe taking w$^{h}$ ffysshing p̄tenith to the king's matie.—Un̄rtayn and to be accompted.

The ffysshery at the Stones.

The ffysshery at the molyns.

The ffysshery of the moredyke.

The ffysshery of the Masondewe.

The ffysshery of the Haven of Calles.

The Quynts of the betterings of the king's lands to be payde to the king's Matie by the Seller Alien̄ at every alienacon. Uncertayne and to be accompted yerely.[a]

The Wreycks of the Sea abowt all the Sea coste of the Scunnage to be gatheryd by the Threr w$^{th}$ the ayed of Thenhabytaunts and brought to the Baylyf to be answerable to the owners of the same Soo y$^{t}$ be claymed w$^{t}$hin the space of . . . . . and the king's Ma$^{tie}$ to have therof c$^{s}$ stling and yf the same be not claymed w$^{t}$hin the term then the hoole to the king's use. Uncertayne and to be accompted yerely.

The fferme of the Tolles for gable of the drying of netts w$^{t}$out the walles of Calles taking for every loode of netts iiij$^{d}$ ne sterling worth oïbus Annis xl$^{s}$ st charged in the former rentalles as the same was lett by the Therer of Calles at iij$^{s}$ iiij$^{d}$ st which Thomas Brooke hath to fferme by leave of the generall Survey$^{or}$ as he sayth xl$^{s}$ st fac. xl$^{s}$ gr.

[a] There was also a toll called "le bille money," or fines of strangers, which it is noted was granted in 1515 to Robert Garneys, soldier of Calais.

In 1556, John Knight held the office and profits of tackling of wine within the town of Calais. This was the cellarage, drawing forth and carrying of wines within the town, and for some years was unappropriated having belonged to the "late Chantrie called the Roode Service in the church of St. Nicholas." The tax was for "every tonne of wines not sweet, 4$^{d}$ for cellarage, 4$^{d}$ for drawing it thence, and 4$^{d}$ for carting." For sweet wines the tolls were double. The last chantry priest let out the toll to one Conye for 11*l.* for a terme of years. In 1532 it was complained that the constable of Rysbank and other officers, on the arrival of a merchant ship, "claim to fill their bottles or flagons, some of them of an unreasonable size, with wine out of the cargo."

The fferme of the tolle for beasts and other Carriags passing or repassing over Newnham brydg and ov^r the plasshe called the Stones over the Lede called Travers money and also the Tolle called Sandye money letten to fferme to Armigell Wade Esquire by l^tres patents during his lyf payeng therfor c^s st. by yere and so in the tenure of Barthilmewe Warner by vertu of the sayd graunt payeng yerely the sayd Rent viz.:

ffyrst in the water of St. Peter's and mydelway for every boote w^t potts v^d gr.
Itm̄ for evry busshell of cooles q^a.
Itm̄ for evry boote of Straunge fagotts j^d.
Itm̄ for every straunge boote laden or unladen j^d.
Itm̄ for evry Englisshe hyde ob. q.
Itm̄ for evry flemyssh hyde ob.
Itm for evry horslood of fysshe outwards j^d.
Itm̄ for evry horselood gowing outwards whatsoever y^t be j^d.
Itm̄ for evry barell of bear that goeth out of the Pale j^d
Itm̄ for evry barell of Oyle j^d.
Itm̄ for evry barell of Soope j^d.
Itm̄ for evry dyker of leder ij^d.
Itm̄ for evry other sacke as they be in greatnes
Itm̄ for evry c of whyle tymb^r ij^d.
Itm̄ for evry fardell of lynnen cloth ij^d.
Itm̄ for evry horseloode of lynnen cloth iiij^d.
Itm̄ for evry bullocke sold out of the Pale ij^d.
Itm̄ for evry Englisshe bullock so sold vj^d.
Itm̄ for evry cowe sold out of the Pale ij^d.
Itm̄ for evry fflemysshe shepe qu.
Itm̄ for evry Englisshe shepe ob.
Itm̄ for evry horse or colte solde out of the Pale iiij^d.
Itm̄ for evry mare or mare colte ij^d.
Itm̄ for evry hogge going out of the Pale ob.
Itm̄ for evry Raser of Rapesyde ob.
Itm̄ for evry c felles vj^d.
Itm̄ for evry Rasure of Salt ob.
Itm̄ for evry c of waynskotts vj^d.
Itm̄ for evry barr. of herrings ij^d.
Itm̄ for evry c flesses of wolle viij^d.
Itm̄ for evry barr of Iron ob.
Itm̄ for evry Rasure of Lyme qr.
Itm̄ for evry lode of ffrestone iiij^d.
Itm̄ for evry loode w^t rodds ij^d.
Itm̄ for evry lode w^t great tymb^r iiij^d.
Itm̄ for evry loode w^t hoopes iiij^d.
Itm̄ for evry dryfatt w^t m̄chandyce iiij^d.
Itm̄ for evry horseloode w^t packs of cloth iiij^d.
Itm̄ for evry sack w^t hoppes ij^d.
Itm̄ for evry cartloode w^t Crabbes through Newnham brydge ij^d.
Itm̄ for evry m^l of herring j^d.
Itm̄ for evry c weight of tynne broken or hoole vj^d.
Itm̄ for evry fut of ketelles j^d.
Itm̄ for evry c of brasse or copper v^d.
Itm̄ for evry barell of molten Tallowe iij^d.
Itm̄ for evry cake of Tallowe ob.
Itm̄ for evry way of chese ij^d.
Itm̄ for evry horseloode of whyt Cabage ob.
Itm̄ for evry c of Bourde ij^d.
Itm̄ for evry Sarpler or pockett of wolle passing through Newnham brydge iiij^d.

Sandgelte.

Itm̄ for evry cart w^t wolle or other m̄chandyse laden into fflaunders or out of fflaunders xj^a gr

Itm̄ for evry Long Cart laden wyth m̄chandyse from M^rke gowing or comyng vij^d ob.

Itm̄ for evry Short cart laden w^t marchandyse gowing or commyng from M^rke or to M^rke from Mydelwey or to mydelwey iij^d ob.

Itm̄ for evry Sacke w$^{th}$ hoppes ij$^{d}$.

Travers mony.

Itm̄ for evry Cart w$^{t}$ wolle or other m̄chandyse gowing into ffraunce or comyne out of France vj. ob. gr.

Itm̄ for evry horseloode of pocketts iiij$^{d}$.

Itm̄ for evry horselode w$^{t}$ packs iiij$^{d}$.

Itm̄ for evry hondryth flesses of woll going out of the Pale into ffrance, vj ob.

Itm̄ for evry c woll felles vj$^{d}$ ob.

All which are letten to farme to Armigell Wade Esquire by lre patent for terme of his lyfe paying therfore c$^{s}$ st by yere and so in the tenure of Barthilmewe Warner of the said graunt paying yerely the said rent viz. vij$^{li}$ x$^{s}$ gr.

The serche at Newenham Bridge letten to farme to the within-named Bartholmewe Warner by the graunt aforesaid taking xij$^{d}$ of the pound of all that he sèasethe adiudged forfaite and the rest to answere into thexchequer at Calleis—uncerteyne and to be accompted.

All other casualties viz. frayes Blodwrightes Maymes Cornebootes fynes amercements for orders broken and trespasses wayffes strayes deodans ffelons goods and traytoures goods and lands and all other droytes Royall in the said Skunage in lyke sort as is declared & set fourth for the Lordships of Marke and Oye ar yerely to be enquyred of and presented in the courts of Frankveritie of the sayd Skunage from tyme to tyme as they fall and as well the same as the Qwynts aforemenconed relese of evry alyenacon and chaunge of the King's tennts to be certefyed into thexchecquer of Callice by the Mayour exchetour there The Baylyve and fremen of the same by extract out of their courtroll and the records therof to be dulye entred and enrolled in their courtrolles.—Accomptable as casualti es.

| | |
|---|---|
| Sm̄ of the Rents and ffarmes within the Skunage of Callice | cx$^{lj}$ viij$^{s}$ vij$^{d}$ qr. gr. |

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## APPENDIX IV.

### Tolls &c of Guines.

Tolles dewe and accustomed to be taken within the Cowntye of Guisnes of all m̄chandyse passing in or owte.

The Rate and dewtye of the w$^{ch}$ Tolles are here pticularly registred according to an awncient extracte therof geven owte to the offycers by S$^{r}$ Rychard Weston knight late Threr of the Kynges Ma$^{ties}$ towne of Calleys the xvj of Julye 1528.

The Tolle of Guisnes to be taken at the Ewline Way. ffirst of every busshell of Coles q[a] Itm̄ of every hide ob̄. Itm̄ of every horslode of fysshe j[d]. Itm̄ of every horslode whatsoever it be j[d]. Itm̄ of every barrell of bere j[d]. Itm̄ of every barrell of sope j[d]. Itm̄ of every barrell of Oyle j[d]. Itm̄ of every dicker of lether ij[d]. Itm̄ of every sacke as they be in gretnes. Itm̄ of every C[th] of whele timber ij[d]. Itm̄ of every m[l] of Hering ij[d]. Itm̄ of every fardell of linen clothe ij[d]. Itm̄ for every horselode of clothe iiij[d]. Itm̄ for every Bullocke sold owt ij[d] Itm̄ of every englyshe bullocke vj[d]. Itm̄ of every Cowe j[d]. Itm̄ of every shepe j[d]. Itm̄ of every hogge ob̄. Itm̄ of every Horse or Horse colt iiij[d]. Itm̄ of every Mare or Mare colt ij[d]. Itm̄ of every Rasier[a] of rape sede ob̄ Itm̄ of every Rasier of Salt ob̄. Itm̄ of every C[th] of ffelles vj[d]. Itm̄ of every C[th] of wainscot vj[d]. Itm of every barrell w[th] hering ij[d]. Itm̄ of every barre of Iron ob̄. Itm̄ of every Rasier of lyme q[r]. Itm̄ of every lode of Tymber iiij[d]. Itm̄ of every lode w[t] Roddes ij[d]. Itm̄ of every lode w[t] cabages ob̄. Itm̄ of every lode w[th] Crabbes ij[d], Itm̄ of every C[th] of ffleces of wolle viij[d]. Itm̄ of every lode w[th] freestone iiij[d]. Itm̄ of every horselode of pocketts iiij[d]. Itm̄ of every horselode w[t] packes iiij[d]. Itm̄ of every Sarpler or pocked w[t] woll iiij[d]. Itm̄ of every drye ffatt of ware or marchandise iiij[d]. Itm̄ of every fulte of Kettles j[d]. Itm̄ of every C[th] waight of tinne broken or whole vj[d]. Itm̄ of every C[th] of brasse or Copper v[d]. Itm̄ of every Barrell w[th] tallow iij[d]. Itm̄ of every Cake w[t] talow ob̄. Itm̄ of every C[th] of borde ij[d]. Itm̄ of every lode w[t] hoppes iiij[d]. Itm̄ of every cart w[t] woll or other marchandyse vij[d] ob̄.

The Lorde Graye Wiltonne Capp[ne] of Guisnes now Receyveth the same paing yerely as the same hath bin accustomed to be letten to fferme nil hi[t] q[a] oñ-aꝑ cū ffirm. terr. dñico Castri de Guisnes.

The tolle at the market of Guisnes of every C[th] of woll viij[d] gr. Itm̄ of every mare solde on the market j[d] ob̄. Itm̄ of every horse ij[d] qr. Itm̄ of every cow ij[d] qr. Itm̄ of every hogge j[d] qr.

The Tolle of Hawntyngham in the fforest of Guysnes To be taken of all marchandyse passing throw the fforest of Guisnes Viz. of every wagon laden Thre stivers, of every short cart laden having ij bestes therin ij styvers, and ther be but one beste therin j stiver. Of any horse laden a flemysh j[d], of every foteman laden a flemish ob̄.

The fforrester of Guisnes and his raingers ought to levye the same and are to be charged therew[t] upon there Accompt.

The Tolle to be taken at Guisnes faire to be taken of the byer, viz of every shepe or hogge di souse french, of every cowe or oxe j souse frenche, of every horse or mare ij souse french also Stallage that is to wete of every Stall Rowe.

The Baille of Guisnes receyveth the profett of the same and ought to be accomptable thereof.

The Tolle of Ballingham haven to be taken of all botes laden there going or coming to wete of every bote laden w[t] wode or bere ij Souse frenche. And of every hundreth of Tallowe . . . . And of every C[th] of Hyde.

The Lorde Graye Wilton Capp[ne] of Guisnes now Receyveth the profett of the same paing yerely as the same hath bene accustomed to be letten to fferme x[s] gr.

[a] A rasier or raser was four bushells.

The Tolle of the Cawsye to be taken at the Turne pyke of Cawsie of all merchandyse or ware according to the rate above sett fourth for the tolle of Guysnes.

The same Lord Gray Wilton Capp^ne^ of Guisnes now receyveth the profett of the same paing yerely as the same hath been accustomed to be letten to fferme vj^li^ xiij^s^ iiij^d^ gr.

The Tolle of Pounte de Calleys at the foorde beneth Scales hill in the valley betwixt y^t^ and Whitsand w^ch^ was the awncyent ann^te^ of thenglyshe pale & wont to be taken to the use of the Kings of England at the upper forde where the old forde was, where standeth yet the Ruine of the Tollers House fast by the sayde olde bridge.

The ffrenche men at this ꝑsent have encroched upon the englishe ground over the sayde awncyant lymyts so that no ꝑfett at this day ys receyved of the sayde Tolle.

The ffowlinge and ffyshinge w^t^in the sayde Cowntie.

The ffowling and ffyshing of the waters and plasshes of Guysnes and Mellack w^t^ also the fyssherye house at Guisnes.

The Lorde Graye Wylton cap^ne^ of Guysnes holdeth the same as ꝑcell of the demaynes of the Castell of Guisnes paing yerly as the same hath bin wonted to be letten to fferme.

The ffowling and ffyshing of the waters and plasshes of the Lordshipp of Ballingham.

The Sayde Capp^ne^ of Guisnes holdeth the same as ꝑcell of the cõmodyties belonging to the Castell of Guisnes paing yerely as the same hath ben wonted to be letten to fferme.

Releifes dew to the King upon every alyenacion and chaunge of a tenũte ys the fourth ꝑte of the Rent.

Other Casualtyes & droyts Royall belonging as well to the Seignorye of the cowntie of Guisnes as to the Lordships of Ballinghm̃ & Sandgate. The Receyvo^r^ accompteth for the same —yerely in his accompt.

ffynes and amercemẽts presentable every yere at the Court of ffrankverytie.

To wete every household ought to pay to the King for the ffrankverytie vj^d^ gr. whether they appere or not.

The increment ordynarye of every tipler of bere or ale ys to the King ij^s^ gr. in grosse or ob gr. of every Barrell.

The ffine for every blodshed is to the king xij^s^ gr. The ffine for every fray that is no blode shedde ys to the King ij^s^ vj^d^ gr.

The ffyne or boote for plowing nere to the Kings high waye ys to the King x^s^ gr. The ffyne or boote for breking another mañes hedge or fence ys to the King x^d^ gr.

The Baylie and lawe of Guisnes are answerable and accomptable for all theys casuaties except for the Lordship of Sandgate for the w^ch^ the Baylie and lawe of the sayde Lordship are answerable and it ys ordeyned that yerely the sayde Bayllies and lawe shall geve into the Eschequer of Calleys severall extracts of the sayde ꝑsentmẽts and out of the same aske theyre allowannce of the Costs of their Corrt of ffrankveryte and of all execution of Justice and make paime^nt^ of the rest of the same. And that the costes of the same keping of the ffrankverytie shalbe unto every of the Baylies ffree men and Clerks & s^r^geãts onely viij^d^ for theyr dietts.

The ffine or bote that every beaste be yt horse or neate Shepe or Swine male or ffemale yonge or olde damage ffesant in the corne or high grasse of eny parson eyther growing or

felled and standing in the field, ys to the king x$^{d}$ gr. And the lyke of every cart. The ffine or boote of every pownd breche ys to the king x$^{s}$ gr. The fine or boote for disobeing tharrest of every hedde officer or Sergeant ys to the Kinge x$^{s}$ gr. The ffine or boote of whomsoever fenseth not his court or house place and closes wherby his neighbour be endamaged ys to the king x$^{s}$ gr. Also all penalties and forfytures sett for orders and rules broken according to the assesment by the Court aforesett. The fforest bootes or fines dew to the king for trespasses there as whoso cut the grene woode there forfeytes to the king for every soche offence ij$^{s}$ gr. ffor every beaste taken damage ffesant forfeytes to the king ij$^{s}$ gr. Whoso cutteth any of the kinges timber trees in the forest forfeytes for every soche tree cut x$^{li}$ paryses. Who so cutteth downe any trees that stonde for bowndes eyther of the lymytts of the Pale or of the fforest forffeytes to the king— Whoso conveyeth oute of the Pale w$^{t}$out suffysient lycence eyther Corne Cattell or victuell forfeyts to the kinge—Whoso conveyeth out of the Pale w$^{t}$out suffysient lycens or passe port therfore anye golde or sylver coyned or bullyon or chaines Ringes owche or Juell exceding his estate to were forfeytes the same to the kinge All waiffes Strayes Tresure trovye deodaynes are the Kinges dewly fownd and tryed. Of all goodes and Cattells and the one yeres rent of the landes of ffellons yf the offendo$^{r}$ have wyfe and chyldren the king shall have the iij$^{rd}$ part, yf thoffendo$^{r}$ have wyfe and no children or children and no wyfe the king shall have the halfe, yf thoffendo$^{r}$ have neyther wyfe nor children the king shall have the hole. And lykewyse of the goodes Cattells and heredytaments for ever of all traturs aft$^{r}$ that rate allowing to the baylie & lawe for thexecucion of every soche offendo$^{r}$ yf he be then apprehended and iudged.

Memorand. the baylyfe & offycers dewty besydes ys to have of every bloudwight iiij$^{s}$ ij$^{d}$ gr. and of every fraye iij$^{s}$ ij$^{d}$ gr. and of every arest xij$^{d}$ gr. yf yt be the sargeāt Royall and viij$^{d}$ gr. yf yt be thunder sargeāt yf they go out of the towne and yf yt be within the towne yt is but the halfe. Also for dystresse of Corne botes or fforest botes or lyke offences iiij$^{d}$ gr.

Memorand. also the Cap$^{en}$ of Guisnes in droyt of the Captenry of the Castle agenst any warres suspected or toward may cōpell any inhabytant in the county to bring into the castell for store of the same Corne and Bacon & other victuell according to the substance of the parson. Provyded that he restore yt them w$^{t}$in xiiij dayes or money for the same according to the p̄ses of the market yf the enemye come not and so may cōpell them to renew the store yf nede be.

Also he hath used and all time may take up in the cowntye at such p̄ses as the market bereth asmuch corne hoppes and victuels as he nedeth for the Castle, paing for the same w$^{t}$in xiiij dayes.

Also he hath yerely of every stocke of shepe so there be an C$^{th}$ in the stocke one shepe of the best instede of a tolle called the wolfe shepe, for the w$^{ch}$ also he ys bownde to hunt the wolfe once in the yere at the leaste. And he hath of every householde that hath hennes a henne by name of the foxe henne, for the w$^{ch}$ he ys lykewyse bownde to hunt the foxe. Also every teñnt in the county except he be a freman keping a whole plough must over and above the kinges rentes serve the Capp$^{en}$ every yere w$^{t}$ iij iurneys w$^{t}$ his long cart or wagon w$^{ch}$ bin called Carroys, one to fetch in his wodde and fuell from the forest, one other to fetch in his hay, and one for his necessaryes to Calleys Also theyre hath bin rated yerely out of the forest to the Castle for every of his C$^{th}$ ordinary Soldyours one C$^{th}$ fagotts of the syse of fyve fote long and ix hand-

full the band, for to kepe theyre ward w$^{t}$. And for the Capp$^{en}$ for his chamber iij$^{ml}$ faggott, and for his Kytchen and brewhouse x$^{ml}$ faggott of lyke syse, he and they paing for the felling and making and cariage yf it excede his ordinary Carroys. But now the same being consydered to be overskant, there ys allowance for his C$^{th}$ soldyours as before and for the Capp$^{ens}$ household and Brewhouse The like fines bootes and amercements are dewe for the Lordship of Hampnes.

The profett therof the capp$^{en}$ of the Castell of Hampnes taketh, answering yerely therfore the rent of the sayde Lordship.

Memorand also that the lyke dryttes the Capp$^{en}$ of Hampnes taketh of that Lordship as the Cap$^{t}$en of Guisnes hath, saving that out of the fforrest he hath for him and his retynew of the Castle vj$^{ml}$ ffagotts of the assyse aforesayde.

The Castell of Guisnes w$^{t}$ the de$^{ne}$ landes and com̄odyties to the same belonging.

The Cap$^{en}$ of the sayde Castell for the time being holdeth and taketh the proffett of theys parcells folloing and for the same answereth the kings ma$^{tie}$ the rents thereon assessed according to the Survey therof made in Anno xviij$^{o}$ Regni nup R. Hen$^{r}$ viij$^{lv}$.

To wete—The ffermes of both Graunges as well the lyttle Graunge as the great Graunge cxliij ra$^{rs}$ of wheate at iij$^{s}$ iiij$^{d}$ gr. the Raser amounting to xxiij$^{li}$ xvj$^{s}$ viij$^{d}$ gr. and in money ix$^{li}$ gr. in all the sayde ij grawnges and ground xxxij$^{li}$ xvj$^{s}$ viij$^{d}$.

Also a medow grounde called the lystes cont. xxj acr. at ij$^{s}$ the acr. amounting to xlij$^{s}$ gr.

| | |
|---|---|
| Also the Hoppyard, the Conygree & the Bryckerye | l$^{s}$ gr. |
| Also the fferme of the watermyll p ann. | xxv$^{li}$ gr. |
| Also the fferme of the ffyssherye and fowling p ann. | xxiiij$^{li}$ gr. |
| Also the Tolle of Guisnes | vj$^{li}$ xiij$^{s}$ iiij$^{d}$ gr. |
| Also the Toll of the Casey | vj$^{li}$ xiij$^{s}$ iiij$^{d}$ gr. |
| Also the Tolle of Ballingham | x$^{s}$ gr. |
| Also the ffyssherye of Ballingham p ann. | x$^{li}$ gr. |
| | Total cx$^{li}$ v$^{s}$ iiij$^{d}$ gr. |

## APPENDIX V.

### Inventory of the Churches in the High and Low Country, 1553.

Inventory of all the churches in the high and low country taken the xxix$^{th}$ of May A$^{o}$ 1553.[a]

The Parish of Marke. The churche wardens thear Markes de Braye, John Malsott, Jois de Clarke, Adrian̄ Johnsonne. Itm̄ a crosse of silver and guilte. Twoo Sencars of Silver Twoo Challecs of Silver. A Sute of Vestments of Bawdkine, To saye thre coopes a vestment, twoo tunicles w$^{t}$out albs. Bells in the Steple whearof one serving for a clocke.

Gemp. Itm̄ in the Chapell of Gemp annexed unto the pishe of Marke one bell w$^{ch}$ is the cheif Allarum bell for the lowe countrey.

[a] Augmentation office, 407.

Oye. The churche wardens John Partrig, James Hayenes, Andre Harbert de felde. A challice of Silver. A coope of Reed. Twoo bells. A Stock of Sheape.

Colham pishe. The Churche wardens thear Adrian Skell, Peater Barris, John Croke. A challice of Silver. A bell in the Steple.

Olderkerke. The Churche wardens James Fowler Marien Johnsonne. A challice of tine .A challice of lead. A table cloth of Lynnen. A bell.

Newkirke. The churche wardens Valentine de Roy, Richard Watisonne. A challice of Tine. A table clothe of lynnen. A nolde vestment.

Ofkirke. The churche wardens George Giles Adrian Lambe. A challice of Tine. A table clothe of Lynnen. A bell.

Saint Peatars. The churche wardens John Bear, Xpofer Standard, John Dodd. Challeces of Silver v. A blew Damaske cope. A whight vestment of Sattē of bridgs. A tawny vestment of clothe of Bawdkin. A vestment of blew saye. Twoo olde Towells. Twoo bells and the thirde solde because hit was broken. A paule of blew velvet olde. A paul of clothe of Baudkin.

### *The High Cuntrie.*

Buckard. The churche wardens Adrian Sprit John Hanecruyt. A challice of lead. A nolde vestment. Twoo table clothes. A bell w$^{ch}$ was takē awaye by S$^{r}$ John Wallopp.

Saint Blaise. The churche wardens Casen Langer, Robert Mark. A Challice of Silver solde by Casen Langer and Thomas Russell. A Bell of v$^{c}$ waight remanīg at Guisnes.

Saint Nycas. The churche wardens Thomas Jonnesonne Adrian Mase. A challice of Silver. Twoo Coopes one of blake velvet and thother of silke and silver threde. One bell and twoo bells taken away by S$^{r}$ John Wallopp and redelivered by the Lorde Cobhames meanes and sold aftarward for the makinge of a bulwarke.

Skales. The Churche wardens Robert Cole. Robert Campe. A challice of Tinne. A Coope price viii$^{s}$. not paid as yeat. A Small bell.

Hampnes. The Churche wardens Adrian Arthur, Lancelot Russell. A Challice of Silver. A Coope of olde Chamblet. A bell.

Pitham. The Churche wardens Christian Lewes, Giles face. A Challice of Tiñe. A Coope of fustian. A bell w$^{ch}$ now remanith at Calkwell.

Sandgat. The churche wardens James Cone, John Skotman, Nicholas ffawdrell & E. Andrew .A challice of Silver. A challice of Tynne. Certaine broken Silver. Three vestments broken. And one bell delivered to Bowen Armerer, who saythe it was stolen. Three olde Lynnen Towells.

Ballingham. Challice of Tynne. A Cope.

Audren. Churche wardens John Husoure John Loryner. A Challice of Silver w$^{t}$ a patten. A nolde Cope. Twoo table Clothes. Twoo bells carried to S$^{r}$ John Wallop[a] in Guisnes castell.

[a] Sir John Wallopp was lieutenant of Calais Castle from 6 Oct., 1530.

Camp. A challice of Silver. Twoo table clothes. A bell brought and delivered to Sir John Wallopp at Guisnes.

Guisnes. Churche wardens Richard Woodrof, George Rufferd, Saunder Robert, Anthonie Coward. A challice of Silver. A nolde cope. A suet of vestments Certaine plate solde by M^r^ Wallopes commandement to the valew of L^li^ w^ch^ was emploid for the making of the Church. The bells wear delivered to M^r^ Wallopp.

Peplinge. The churche wardens John Keals, John Johnsonne. A Challice of Silver. A coope of Redd saye. One Table clothe. A small bell. A payer of Candelstickes of Brasse.

Harvelingham. Churche wardens W^m^ Edwards, Pacquen Rouge. A Challice of Tinne. A coope of Olde Silke.

Chalkwell. Churche wardens George Spirt Trusonne du Va, W^m^ Hayes, Raynold Coket. A Challice of Silver. A Table clothe. A bell w^ch^ belonged to Pitham. And M^r^ Wallopp had one bell from Chalkwell.

Froytonne. Churche wardens Steven Holland, Hugh Barrier. A challice of Silver w^ch^ was solde unto M^r^ Hampnes. A nolde coope of Redd. One table cloth. A bell broken; M^r^ Wallop had thother bell.

## Church Goods of O^r^ Lady Church, Calais.[a]

An Inventorye Indented taken by us Willm̄ Portor, Willm̄ Grene, John Hillyarde, and Thomas Appelbee, John Delanowe, Thomas Burye, & Oliver Turnor, wardens of O^r^ Ladies churche in Callais of all suche plate, Juells, money, vestments, and implements belonginge to the same churche w^ch^ We fynde There the vj day of Octobre a° 1552 and p̄nted by us the said wardens to the Right Honourable Lord Willughbye L^t^ Deputye generall of the towne and marches of Callice, M^r^ John Cavell Maio^r^ of the same towne, and S^r^ Maurice Dennys knighte Threr of the saide towne & marches, the Kings Ma^ties^ Commyssioners appointed in that behalf.

| | |
|---|---|
| ffurste twoo pare of Crewetts parcell gilte weynge | xxiiij^li^ ounces. |
| Itm̄ a Cresmytorye all gilte weyng | lj ounces. di. |
| Itm̄ sixe Challiceis w^t^ sixe patentes all gilte weyng | cxxx^ti^ ounces. |
| Itm̄ one Oyntemente boxe weyng | iiij ounces. |

Itm̄ one gospel booke gilte.

Itm̄ one sute of vestimentes of blewe velvet viz. three coopes one vestment the deacon and subdeacon wythoute albes.

Itm̄ one sute of vestimentes of blewe velvet imbrodered w^t^ flowres of golde viz. three coopes one vestment the deacon and subdeacon w^t^out albes.

Itm̄ a Cope one vestiment of white Damaske. The Deacon & subdeacon imbrodered w^th^ golde w^t^out albes.

Itm̄ one sute of Vestimentes of redde velvet viz. three coopes one vestment, the Deacon and subdeacon w^t^out albes.

[a] Q. R. Miscellanea, $\frac{19}{13}$

Itm̄ an old sute of vestimentes of white Damaske embrodered w$^{th}$ flowres of golde viz. three coopes one Vestment, the Deacon and Subdeacon w$^{th}$out albes.

Itm an old sute of vestimentes of blacke Chamblet viz. one cope one vestment, the Deacon and Subdeacon w$^{t}$out albes.

Itm̄ twoo Vestimentes of blewe Damaske w$^{t}$out albes.

Itm̄ three Vestimentes w$^{th}$ flowers of golde w$^{t}$out albes, viz. one of rede velvet one of blewe velvet and one purple velvet.

Itm̄ one Vestiment of grene Velvet wyth a crosse of Sylver.

Itm̄ twoo olde Vestimentes of clothe of Bawdkyn w$^{t}$out albes.

Itm̄ one olde Vestmente of blewe Bawdkyn w$^{t}$oute albe.

Itm̄ one Vestimente of reed Tensen satten w$^{t}$out albe.

Itm̄ one Vestiment of reed satten w$^{t}$ a crosse of grene velvet usen upon goode ffriday.

Itm̄ one Vestiment of white Lynnen clothe w$^{t}$out albe.

Itm̄ one pawle of blewe velvet w$^{t}$ bells of Sylver and a crosse of golde and one other pawle maide of olde vestimentes died Blacke.

Itm sixe Corporus Casses of golde and Velvet.

Itm̄ twoo old Corporus casseis one of black velvet and the other embrodered wythe golde.

Itm̄ sixe fruntes viz. one of Clothe of sylver embrodered w$^{th}$ the assencion of oure Ladye and flowers of golde, One of Clothe of golde and blewe velvet pawnde w$^{th}$ flowers of golde, One of white and reed silke, One of blacke satten w$^{th}$ reed flowres, One of grene silk wyth birdes of golde, and one of white cloth for Lent.

Itm̄ one clothe for a desk of blue worstedde.

Itm̄ foure paire of Curteynes belonginge to the hiegh Altare, viz. one pair of white dammaske dammasked w$^{th}$ golde. One paire of greene sarcenet, One paire of Tawnye sarcenet, and one paire of Lynnen cloth paynted.

Itm̄ foure quesshinges, viz. two of greene cloth of tyssue, one of reede frynged silke, and one of reede silke w$^{th}$ a beare embrodered apon it.

Itm̄ a vayle in twoo partes of white and blewe Clothe.

Itm̄ a smale clothe for the hiegh Altar w$^{t}$ the picture of Jesus upon it.

Itm̄ one olde Careclothe of white and reed.

Itm̄ one coveringe of the Cannopye that hangs over the sacrament for Lent.

Itm̄ one cannapye of clothe of golde and reed velvet wythe the Vallence thereunto belonging.

Itm̄ a case that covered the sacrament of clothe of golde and reede velvet lyned wythe grene tensen.

Itm̄ twoo Cannapies for the sacraments, one of reed sarcenet frynged w$^{t}$ golde and another of whyte silk nedleworke frynged wythe golde.

Itm̄ twoo Candlestickes of brasse for the hieghe Altar.

Itm̄ a smale hollywater potte of brasse.

Itm̄ a smale Lion of brasse

Itm̄ seven lynnen altare clothes for the hiegh altare & eyght diap towells.

Itm̄ one olde carpet of Tapissarrye.

Itm̄ fyve Belles weyinge seventeene thousande nyen hundrethe & thre score pounds.

Itm̄ the Clapp$^{rs}$ of the same bells weyng fyve hundrethe thertie-seven pounds.

Money belonging unto the saide Churche.

ffrste in thandes of John Bryskyn c$^{li}$.

Itm̄ thandes of Willm̄ Abeall c$^{li}$.

Itm̄ in thandes of John Knighte iiij$^{li}$.

Itm̄ in thandes of Will$^{mi}$ Portor C$^{li}$ whereof receyved to paye for certaine repac̃ons and the mynisters wage w$^{ch}$ was due at Mydsomer last xxx$^{li}$ and Restes in thandes of the saide Will$^{mi}$ portor lxx$^{li}$.

In Wytnes whereof unto thies p̃nte Inventories indented aswell the Commyssioners above named as the saide Wardens severally and enterchangeably have put theyre Seales.

| | | |
|---|---|---|
| + | John Hillierd | John Delanoy |
| W$^{m}$ Grene | Thom$^{a}$ Appelbe | Thomas Bury |

The Inventory taken by Us Thomas Coines Willm ffynckell John Broker Edward Churchyarde Richard Ball and John Sylvester wardens of Saynct Nicholas churche in Caleis of all suche plate vestments and Implements belonginge unto the sayd churche which we fynde there the vij$^{th}$ of Octobre 1552 delyvered by us the wardens aforesayd to the right Honorable Lorde Willoughbye Deputie S$^{r}$ Mauryce Dennys Knight Thesaurer and the Worshippfull Mr. Cavell Mayor of Calleys.

Com̄yssyoners appoynted.

| | |
|---|---|
| fiyrst fyve challyses w$^{t}$ Patents all gylt wainge | cx ounces. |
| Itm̄ a Crismytorye all gylt wainge | xlix ounces. |
| Itm̄ a pax of copper w$^{t}$ a picture of our Lady in sylver. | |
| Itm̄ a pax of sylver wainge | iiij$^{or}$ ounces di. |

Itm̄ a vestment of white Damaske and a cope of the same.

Itm̄ ij Copes of blacke fustyan de naples.

Itm̄ Table clothes iiij & vj Towells.

Itm̄ ij Cusshynes of blewe velvet.

Itm̄ iij Cusshynes & a Carpett of Tappesterye.

Itm̄ a grene carpet upon the Table.

Itm̄ a pawle of Tawnye velvet.

Itm̄ iij pawles de fustyan de naples.

Itm̄ a pulpytt clothe of grene Damaske.

Itm̄ fyve bells hanginge in the Steple.

Itm̄ Receavyd for certeyne Implements solde for necessitie to repayre the churche because we coulde not gett in the money then Owinge to the Churche, the whiche things so solde amountyd to the Sm̄ of xlij$^{l}$ st.

These be the Debts owinge unto the sayd Churche.

[Here follow the same debts as those given in Q. R. Miscell. $\frac{5\,0\,1}{4}$.]

Our Ladie churche in Callice.

The names of suche psonnes that have taken money of the Churches as may appear by ther sev̄all Dedes.

Willm̄ Abeall c$^{li}$ starlinge who hathe assured certaine howses in Callice as appeareth by his dede for the repaiment of the same and x$^{li}$ for interest made unto the Lorde Cobhm̄ then Deputie the Maier and others dated xviij$^{o}$ die junii A$^{o}$ ij$^{do}$ Rs. Edward vj$^{ti}$.

Itm̄ John Knight owithe iiij$^{xx}$ li and hathe assured certen landes of his and Willm̄ Knight's for repaiment, and for Interest, as aperith by his dede dated xviij$^{o}$ Junii A$^{o}$ Reg$^{s}$ Edwardi sexti secundo.

W$^{m}$ Portar owith lxx$^{li}$ over and above xxx$^{li}$ paid before the last commyssion and hath assured certain howses in Callice for the repaiment and for Interest, as appereth by his dede dated xviij$^{o}$ Junii A$^{o}$ Rg. Edwardi Sexti secundo.

John Briskin owith c$^{li}$ and hathe assured certaine landes in Callice for the repaiment and for thinterest as appearethe by his dede dated xviij$^{o}$ Junii A$^{o}$ predict.

Sum. iij$^{c}$ li.

Saint Nicholas churche in Callice.

Money owinge to the same by sundrie men uppon specialtis.

| | |
|---|---|
| Anthonie Pickering man at armes by recongnizance owith | xliiij$^{li}$ strl. |
| John Barlinge prist owith by Obligation | iij$^{li}$ |
| Edmnd Davie owith by recongnizance | x$^{li}$ |
| Richard Windebanncke | xv$^{li}$ |
| Sum. lxxij$^{li}$ | |
| Sm. Tot$^{m}$ of the Special debts | iiij$^{c}$xxij$^{li}$ |

Saint Nicholas churche.

Debts owing w$^{t}$out specialtis and in verie powre mens hands.

| | |
|---|---|
| Dedd by W$^{m}$ Asshetone | xxvij$^{li}$ xi$^{s}$ iiij$^{d}$ |
| Harry Lyons | x$^{li}$ |
| Robert Chambrelaine | x$^{li}$ |
| James Smithe | v$^{s}$ x$^{d}$ |
| Davie Selie | xii$^{s}$ ij$^{d}$ |
| Henry ffronke | xxiiij$^{s}$ iiij$^{d}$ ob. |
| Robert Burgaine | x$^{s}$ |
| John Suet owith for Iron | xxix$^{s}$ ij$^{d}$ |
| Thomas Boyse for iij$^{c}$ leade | xviij$^{s}$ |

M$^{r}$ Francis Hall hathe to answear for a coppe of skarlet velvet pyrlie with clothe of golde.

Andrian Prissley hathe to answear for vestment complet challice and a patten of silver and gult.

S$^{r}$ George Somerset . . . . . hath to answear for a vestment complet a Challice and a pattent of Silver and guilte.

Sm. of these dessperat debts lij$^{li}$ xv$^{s}$ x$^{d}$ ob.

Itm̄ one palle for a Desk of blew woosted xij$^{d}$
Itm̄ ij peare of olde curtens of grene sarsenet viij$^{s}$
Itm̄ one peare of curtens of white Damaske xiij$^{s}$ iiij$^{d}$
Itm̄ one peare of curtens of lynnyn clothe painted ij$^{s}$

Reserved to the Church. Itm̄ fower small quyssens, two of grene clothe of tysseu, one off redde fringed silke and one of redde silke, w$^{th}$ a Bear embrodered upon it viij$^{s}$

Stolen out of the church. Itm̄ a vale in two parties of white and blew clothe.
Itm̄ a small clothe for the high Alter painted w$^{t}$ the picture of Jesus j$^{d}$
Itm̄ an olde Care clothe of white and Redde ij$^{s}$
Itm̄ one coveringe of the cannapie hangenge over the sacrament for Lent of blew sarcenet xij$^{d}$
Itm̄ one cannapie of clothe of golde and redde velvet w$^{t}$ vallance thereunto Lelenginge iij$^{li}$ vi$^{s}$ viij$^{d}$
Itm̄ a case that coverede the sacrament lyned w$^{th}$ grene xviij$^{d}$
Itm̄ two canapies for the sacrament one of Redde sarsenet fringed w$^{th}$ golde and a nother white silke nedle worke fringed w$^{th}$ golde ij$^{s}$
Itm̄ two candelstickes of brass for the high Aulter iij$^{s}$ iiij$^{d}$
Itm̄ a small Hollywater potte of brasse xij$^{d}$

Reserved for the Church. Itm̄ a small lion of brasse xx$^{d}$.
Itm̄ seven olde lynnyn Alter clothes for the high Altar and eighte olde Dyaper towels xx$^{d}$.
Itm̄ a nolde carpet of tapistrye vj$^{s}$ viij.
Itm̄ five bells weyenge seven thousande nyne hunderethe and thre score poundes.
Itm̄ in the clappers of the same bells weyennge five hunderethe xxxvij$^{li}$ Iron.

Som. Tot. lx$^{li}$ xj$^{s}$ iij$^{d}$ st

The wayeght of the plate:
Two peare of Cruetts ꝑcell gilt weyeng xxiiij ounces
A Crismatory box of silver all gilt weyeng 1 ounces di.
iij chalesses with patents wayenge lxvj ounces
Neiontement Box gilt wayenge iiij ounces
plate of Silver gilted of the gospell booke wayenge viij ounces
wayinge in all

c. liij ounces di. at iiij$^{s}$ viij$^{d}$ the ounce xxxv$^{li}$ xvi$^{s}$ iiij$^{d}$.

Two chalesses Reserved for the Church w$^{th}$ the patents wayenge } lx ounces.

XVI.—*The Ancient Settlements, Cemeteries, and Earthworks of Furness.*
*By* H. Swainson Cowper, *Esq., F.S.A.*

Read December 12th, 1889.

## INTRODUCTION.

In the following pages will be found the result of a somewhat careful examination of all the existing ancient sites in the district of Furness, in North Lancashire. The remains themselves are very varied in character, ranging from the rude enclosure of dry-built masonry to the burh of the Anglo-Saxon lord. The accompanying illustrations represent all the most important examples of these; and, as far as I am aware, every site (excepting some groups of cairns, which on parts of the fells are innumerable) will be found described with some detail in the text.

For the purpose of this enquiry, a personal examination has been made of every site in the district. Besides this, I have consulted every work that contains mention, however slight, of the subject.[a] For the most part, these notices are neither

[a] The following are the most important notices on the subject, with a brief statement of the character of each, and an abbreviation used in the text of this paper for reference:

1. *The Antiquities of Furness:* by Thomas West, Close's edition (Ulverston, 1805), contains plans of Aldingham Moat, and the Urswick stone walls (pp. 391 and 397). W.F.

2. *Archaeologia*, xxxi. 448-453, contains a paper by C. M. Jopling, "on the subject of Remains ascribed to the era of the Druids in Furness, north of Lancashire." Plans are given of Urswick stone walls, enclosures at Appleby Slack, Birkrigg, a circle on Kirkby Moor, and also a map, all of which are more or less useless. Arch. 31.

3. *The Prehistoric Remains of Furness and Cartmel;* a paper read by Henry Barber, M.D., before

copious nor accurate; the plans of Close and Jopling being nearly useless; and the deductions are in general vague and unscientific. A large proportion of the remains have indeed never been noticed in print, and one of the most important of the series has, to all intents and purposes, been overlooked altogether.

The plans accompanying this paper are plotted in every instance from a personal inspection and survey; and are mostly the result of careful measurements with the tape. The smaller offsets were, however, in some cases taken by pacing. On the plan of the "Homesteads" on Heathwaite Fell, exceptional care has been bestowed, part of it being practically surveyed by Mr. C. W. Dymond, C.E., F.S.A., who accompanied me to that place on one occasion, and to whom I am much indebted for many useful suggestions and hints.

Although, therefore, these plans may not be able to claim extreme accuracy, they have, perhaps, as much as is sufficient for the objects they represent; and, even if they only induce others better qualified than myself to execute more accurate surveys, they will serve an useful end. I think, however, that no errors of importance will be detected.

There is but one stone circle in good preservation and of any size in Furness; and, as it has been pointed out by Messrs. Flinders Petrie, C. W. Dymond, and others, that remains of this class require the utmost accuracy and care in planning, I have left it alone.[a]

Many of the remains I have visited several times in order to correct or verify first impressions; the settlement at Heathwaite Fell no less than four times.

The plans are, for the most part, laid down to the scale of 50 feet to the inch. The deviation of the compass is rectified as nearly as possible; it being in this district in 1888-9 between 20° 30′ and 21° west of north.

It will be noticed that in the plans of most of the stone-walled enclosures, the walls are indicated by parallel lines, with the intermediate space dotted, while in a few they are shown by the slight shading usually applied to an earthen bank.

the Royal Archaeological Institute in 1868, and printed in pamphlet form at Ulverston. It contains some useful information, but is unillustrated. Barb.

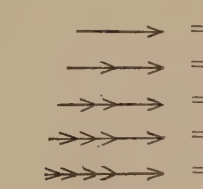
4. *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society*, iii. 241-265, contains a valuable paper on the Archaeological Remains of the Lake district, by J. Clifton Ward, F.G.S. C. and W. iii.

5. *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society*, ix. 200-205 and 497-504, in "Some Prehistoric Remains in North Lonsdale, by H. S. Cowper." C. and W. ix.

[a] Jopling gives a plan quite conventional and useless.

The former method is used where it is possible to ascertain, with any degree of certainty, the original thickness of the wall; the latter where they are too ruinous for this. In some cases, also, the defence may have been nothing but a stone rampart, without any true walling.

The slope of the ground in the vicinity of an enclosure or group of remains is indicated approximately by arrows:




These arrows always fly down hill.

Besides the plans and descriptions of the ancient settlements and dwellings, I have added some account of the primitive sepulchral and miscellaneous remains in the district. This I had at first no intention of doing, but I found the two classes of remains to be so intimately connected, that an account of some sort seemed indispensable.

This paper therefore may upon the whole be regarded as a prehistoric survey of Furness, and I have spared no trouble to render it as complete as possible. A series of well-conducted excavations upon some of the sites would probably prove of the greatest value.

Many of these remains are small and in themselves insignificant, especially if compared with the great hill-forts and extensive earthworks found in other districts. But remains such as these should be studied as a series, and it would be highly interesting to compare them with those in other districts of similar geological formation, as in parts of Wales.

## THE REMAINS.

The district of Furness is the most northerly part of Lancashire, and with Cartmell forms a district known as Lonsdale north of the Sands. Furness itself is bounded upon the north by the river Brathay, upon the east by Windermere and the river Leven; whilst on the west the river Duddon divides it from Cumberland, and its southern side is a sea-board fringed by the broad, dangerous sands of the Duddon and Leven.

Its extreme measurements are twenty-five miles from Elterwater on the north to Concle on the south, and twelve from a bend in the river Duddon near Ulpha on the west to the foot of Windermere on the east.

It is divided in two natural divisions, High and Low Furness, the former being the southern extremity of the Lake district, and a land of heath-grown fells (of hard Silurian slate), containing two lakes, Coniston and Esthwaite. These fells extend also some way into Low or Plain Furness, but south of Ulverston it is chiefly an agricultural undulating country (mainly of mountain limestone and red sandstone), containing, however, some high ground called Birkrigg Common.

It is principally, as is generally the case, on the high ground that the remains we have to treat of are to be found.

In all, there have been observed about thirteen sites of ancient occupation; but possibly some, such as single lines of embankment crossing a fell, do not of necessity carry evidence of ancient habitation with them, and others may be either residential or sepulchral. There are besides these, innumerable sepulchral mounds and two or three stone circles, which may owe their origin to more important rites than those of simple burial.

The entire series may be conveniently divided into

I. Prehistoric.

1. Residential or semi-military:
   - A. Ramparts or entrenchments unassociated with enclosures but associated with sepulchral remains.
   - B. Enclosures of a single rampart or wall.
2. Settlements:
   - A. Dry built, stone-walled enclosures, containing more than one court or apartment, and distantly or closely associated with sepulchral remains, extensive walled enclosures, or outlying stone walls.
   - B. Of anomalous form.

II. Miscellaneous.

- A. Dwellings.
- B. Sepulchral.
- C. Religious?

III. Post-Roman and Anglo-Saxon Earthworks.

It must be understood that in this classification the term "prehistoric" has its widest sense, for, although it is possible that the sites thus classed are pre-Roman, it cannot be actually stated that they are all so until excavations have been undertaken on a somewhat extensive scale. With this in view it has been thought necessary to mark the majority on the new archæological map of Cumberland, Westmorland, and North Lancashire with the symbol Ⓔ. Reference should be made to this map and its attendant index in perusing the following.

## I. Prehistoric.

### 1. Residential or Semi-Military.

A. Ramparts or entrenchments unassociated with enclosures but associated with sepulchral remains.

*Hawkshead Hall Park.* (C. and W. ix).

This is situated on a range of heath-grown fells which goes by the above name, and the height of which is here about 800 feet above the sea level. It consists of two broad mounds or ramparts of earth, one running north-east and south-west, and the other leaving it at right angles and running south-east. The first is nearly a quarter of a mile long and about 11 feet wide, with a shallow trench or ditch about 4 feet in width on its east side. It is composed almost entirely, if not quite, of earth, and is not now more than 2 feet high. The other and longer one is of precisely similar construction, with a trench to the south. Immediately after leaving the first it crosses a rivulet in a little ravine. In one place it is carried along the edge of a brooklet, which supplies the place of the trench; at this point it rises and passes between two small hills, which seem to prove that it is not a defensive work. On the summit it becomes lost or nearly so: but on the opposite side of a stream, which runs at the base, a similar work is found running in a south-south-westerly direction. This is only 8 or 9 feet wide and without a trench; it may be traced for about 100 yards, and then turning at a right angle it passes down the side of a hill in its original direction, assuming its original construction (about 9 feet wide with a 3-feet trench to the south). Here it appears more stony, and is evidently not defensive, being commanded by higher ground immediately outside the trench. Down the side of the hill it has four or five large boulder stones set at intervals in it. At this point it seems to end, although

there are obscure traces of old walling in the fields beyond, which possibly have formed a continuation.

This rampart is rather over half a mile in length.

The trench has, I think, been formed by throwing up earth in the manufacture of the rampart, and is in no sense a defensive ditch.

About 300 yards from the north-west portion is a cairn, which, on being opened some years ago, proved to be of a primitive sepulchral character, and about a quarter of a mile south-west of this are others.

### *Bleaberry Haws Torver.* (C. and W. ix.)[a]

In this case we have a very similar rampart extending from the summit of a hill 1,000 feet in height, across a valley 200 feet deep, on to the summit of another hill about 70 feet higher than the first, passing which it turns to the left at a right angle, thus in part enclosing the hill, and after a short straight run of less than 200 yards it comes to an end.

Its general direction is north-west and south-east; its construction similar to that on Hawkshead Hall Park, but in one part the earthen rampart is exchanged for a stone wall. The rampart is about 10 feet wide, and has in places a trench or depression about 2 feet wide to the north-east. The stone wall portion extends only about 200 yards up the steepest part of the second hill, and seems to have been composed of a low dry-built stone wall perhaps originally about 4 feet wide, although in its present ruined condition it is considerably more.

There is also a branch embankment joining the southern portion of the main one in the valley. In the immediate vicinity occur cairns, proved by excavations to be sepulchral, ring mounds, a small stone circle, and within a radius of just over two miles, stone-walled enclosures, which will presently be described.[b]

[a] Contains plan and description.

[b] As the depression by the side of the rampart above mentioned has been the subject of controversy in a local paper, I must state that it does not appear to me to be in any sense a ditch, *i.e.* one of defence. In my opinion it is due, 1st, to the casting out of earth for the formation of the rampart (to some small extent); 2nd, to sheep sheltering from the prevailing south-west wind under the embankment, and grubbing and burrowing under its lee side; 3rd, to denudation by natural drainage, the embankment being in part built down a natural hollow. The trench is not to be found where the embankment is exchanged for a wall.

B. Simple enclosures contained within a single embankment or wall.

*Birkrigg.* (Barb).

Birkrigg Common is a limestone hill, 450 feet above the sea level, and about two-thirds of a mile in diameter, and lies just over two miles south of the town of Ulverston.

On the north-east slope, at a place called Appleby Slack, is a simple and small enclosure (fig. 1). It consists of a single rampart or vallum of earth and stones, enclosing a somewhat pear-shaped area, and at present in some places about 10 feet wide. The height of the vallum is insignificant.

Its construction may be similar to that of Urswick stone walls, which will presently be described. The interior is level and the ground rises from the enclosure on the south and west. There is also an entrance upon the east.

A little distance west there is a mound (unmarked in the Ordnance Survey) which has every appearance of a tumulus, and rather less than half a mile south-east a double concentric stone circle; just over a mile south-west is an

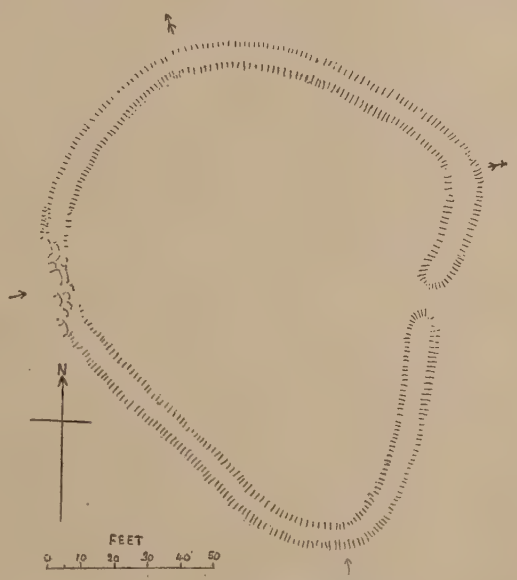



Fig. 1.—Appleby Slack, Birkrigg.

*Enclosure at Holme Bank, Urswick.*

This consists of a single rampart or embankment of earth and stones (fig. 2) which, with a natural limestone excrescence, encloses a five-sided figure.

On the west side, where this limestone outcrop completes the *enceinte*, the artificial work is omitted, or possibly has been removed. The rampart in its present condition is 10 to 14 feet in width, and on the east, where it is highest, it does not exceed 3 feet. The entrance, which is also on this side, seems original. The east and south sides are further defended by a slight ditch. Within the enclosure are traces of foundations or cross walls; their plan is somewhat obscure.

In the southern part of the *enceinte* is a low circular embankment, perhaps the remains of a dwelling. Outside, at the point marked *a*, are more obscure foundations, possibly of some sort of outwork.

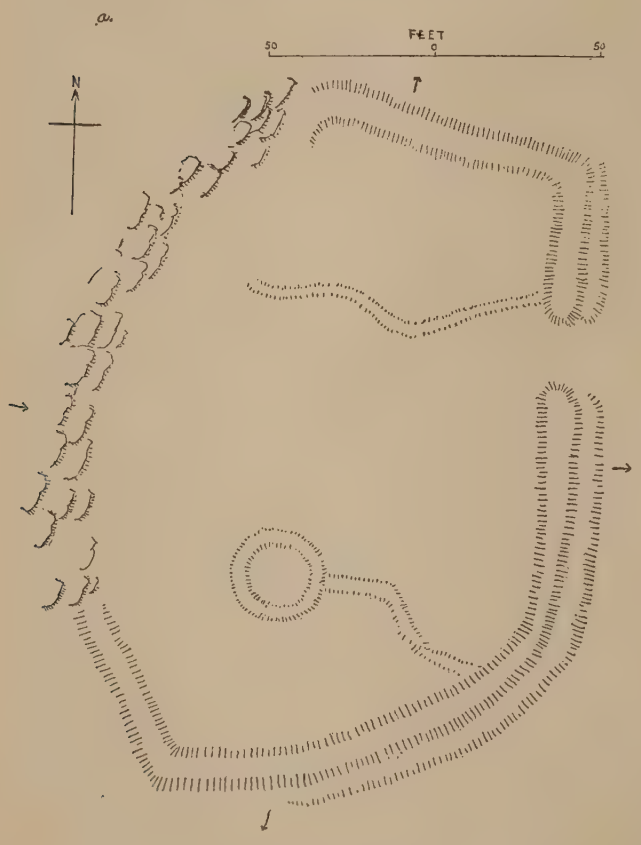



Fig. 2.—Holme Bank, Urswick.

The rampart is not improbably of similar construction to that of Urswick stone walls. The ground slopes away easily from the camp all round, except on the west, where it rises also easily. The ground within the enclosure rises slightly towards the centre.

*Torver Beck, Bannishead Moor, near Coniston.*

This interesting little enclosure is situated about 350 yards south of the ancient pack-horse road from Coniston over the Walney Scar Pass to Seathwaite, and about half a mile south-west-by-west of Bannishead Mire.

It consists of a rampart or wall of stones of all shapes and sizes, which, with Torver Beck, its south-west defence, forms a four-sided figure (fig. 3). In its present ruined condition it is difficult to say anything as to the construction of this stone wall or rampart.

The gaps on the north-west and south-east seem ancient, but a track road runs through them to Torver.

Torver Beck, at the bottom of a deep ravine on the south-west side, forms both a strong defence and an excellent water supply; water could be drawn straight out of it into the enclosure.

The ground within is very rough and rocky, and there is a segment of a circular foundation on the edge of the ravine; outside, on the north, the ground

Fig. 3.—Bannishead Moor, near Coniston.

rises towards Coniston Old Man, and there is upon this side a pond which has a somewhat artificial appearance.

About 100 yards south-west, upon the opposite side of the stream, is a ring mound, and in the immediate vicinity of the enclosure are innumerable cairns; within a radius of a mile there are other enclosures, the Bleaberry Haws embankment, ring mounds, and many cairns.

### *Stone Rings, Heathwaite Fell.*

This enclosure (fig. 4) is in all probability a member of the Great Heathwaite Fell settlement, presently to be described, but as it is quite separate and comes under the heading now treated of, it is advisable to describe it here.

It is situated upon a somewhat elevated plateau (c. 500 feet), which is marked in the 6-inch Ordnance sheet as "Stone Rings," and is about half a mile south

of the southern end of the Heathwaite Fell settlement, between which and it, hollow marshy ground intervenes.

This site is very strong towards the north-west, in places precipitous, but the containing wall of the enclosure is not built upon the edge of the precipice, but from 50 to 100 feet from it. It is also fairly strong towards the north-east, but there is level or fairly level ground to the south-east and south ; these last-named sides are however partly protected by bogs.

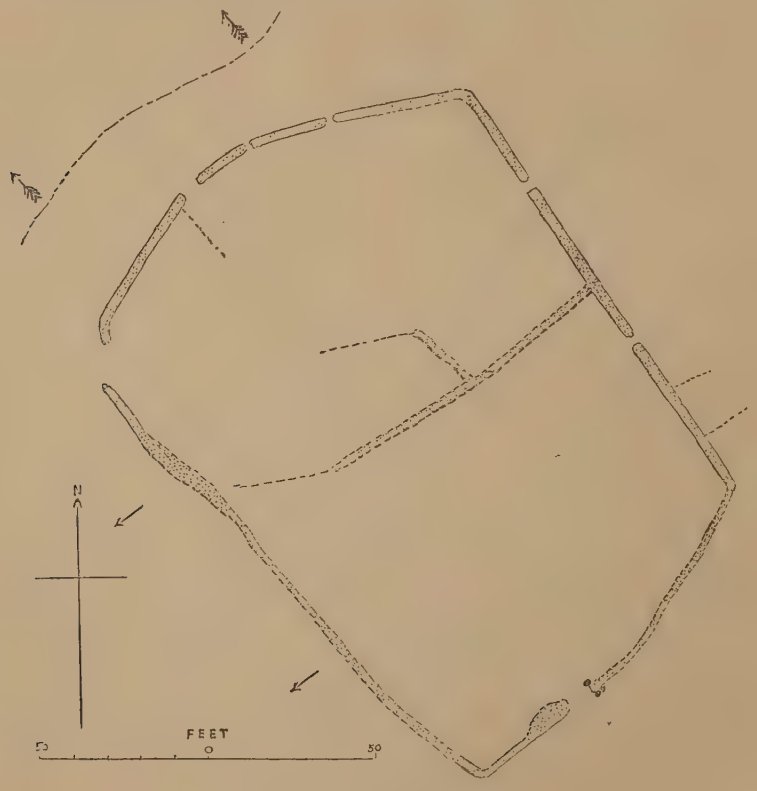



Fig. 4.—Stone Rings, Heathwaite Fell.

The enclosure is in shape a rough parallelogram of about 180 feet by 130 feet, contained within a dry stone wall, most of which is now very ruinous, but which seems generally to have been 3 feet thick, but on the south-east only 2 feet. There are many gaps in it that render it difficult to tell which may have been ancient entrances, but some of them have largish stones still erect in the position of jambs ; there are three such at the south entrance.

The interior walls shown upon the plan are very ruinous, and in some places even hard to trace. Near the south-east corner, outside the wall, and on the north-west side within, are lines of single stones embedded in the earth.[a]

About 350 yards north-east on the road to Burney Farm, and close by a little tarn, are cairns and ruined walls, and there are traces of another wall connecting the camp with these in an intervening hollow.[b]

This enclosure may have been a camp of defence on the seaward side, and for the protection of the large settlement close by, and it has a much more defensible position than the homesteads or residential part of the latter. It commands the ground extensively in a southerly direction.

*Scrow Moss, Coniston.*

In this case we have a slight deviation from the type, the line of the enclosing wall being broken by a circular chamber (Fig. 5).

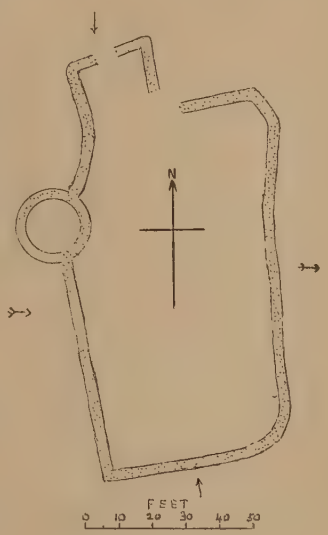


Fig. 5.—Scrow Moss, Coniston.

The enclosure, which is of small size, is situated near the base of Coniston Old Man, being on a slope below the road, which leaves the ancient pack-horse thoroughfare from Coniston to Seathwaite at about a mile from the former place, and runs towards Levers Water and the Coniston copper mines; it is a little south of an eminence called "the Bell," and between another called "Big Hill" and a peat moss (Scrow Moss). Its shape and dimensions can be better under-

[a] These I have been assured are "guards" for woodcock sprints, and they are certainly very like in construction; but as they occur in a very similar position at the adjacent settlement, I think it better to notice them and to mark them on the plan; their position is peculiar, being thus placed in conjunction with the ancient walls, and they are not in the usual hollow in which woodcock sprints are generally found.

[b] At a little distance to the north-west, on a road to Knott End farm, I observed a stone which seems to have been used for sharpening a narrow-pointed instrument or weapon. It has upon it a groove 8 inches by 2 inches containing many small parallel grooves apparently formed by a sharp point, and each of which may perhaps be from $\frac{1}{4}$ to $\frac{1}{8}$ of an inch wide.

Another stone of similar character I have noticed on a fell to the east of Coniston Lake, near Park-a-moor. This stone is also small, about 2 feet long, and has upon it a similar irregular groove, in length 6 inches, and in greatest width $2\frac{1}{2}$ inches, which is made up of smaller grooves in the same manner.

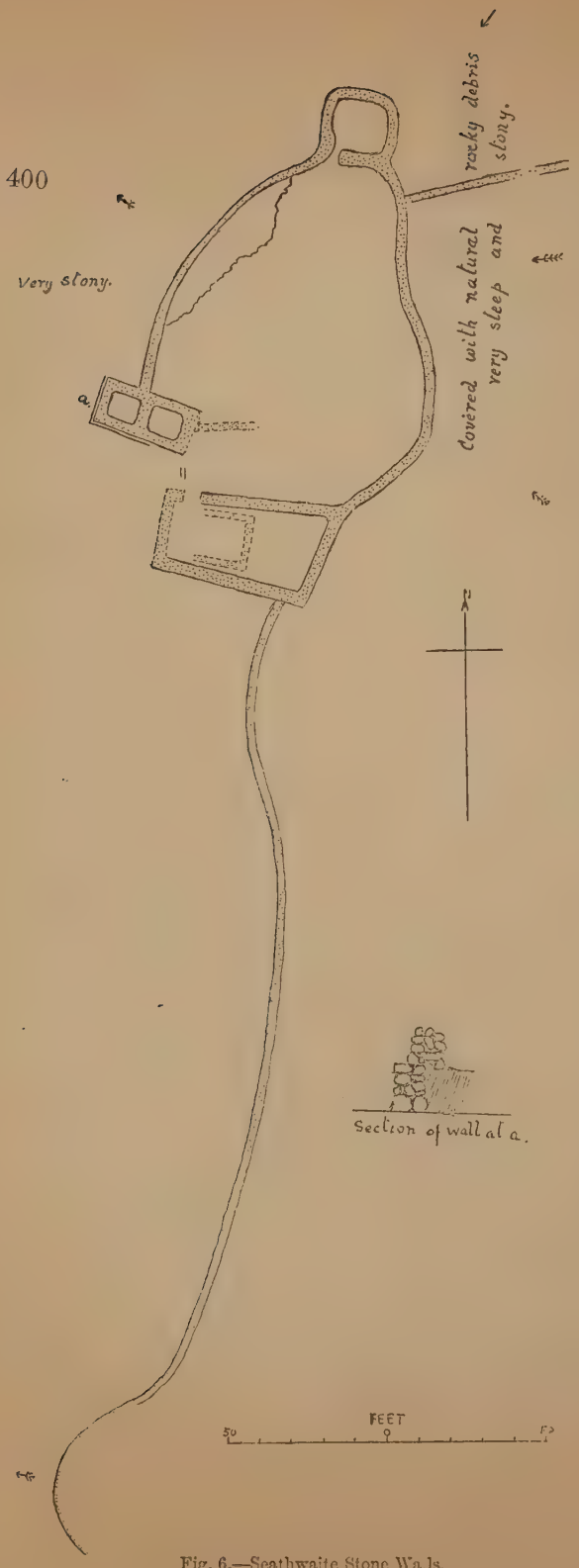



Fig. 6.—Scathwaite Stone Walls.

stood from the plan (Fig. 5) than from description. It is situated on a steepish slope to the east, and its wall has been originally about 3 feet thick, and composed, as usual, of stones of all shapes and sizes. A small detached piece of wall, of horseshoe shape, is situated 100 feet from the south-east corner; its diameter is 19 feet and its wall is about 4 feet thick.[a] It is hard to tell if the gaps at the north end of the large enclosure are ancient or not. The interior is hummocky, and perhaps covers other foundations. The place is quite indefensible, the ground on the west, north, and south being all higher than the interior of the enclosure. There is much natural stony *débris* in the vicinity. Scrow Beck to the north would form a fair water supply.

This enclosure is just about a mile north-east of the remains at Torver Beck; and cairns occur less than half-a-mile north-east and a quarter south.

[a] Not shown on the plan.

## 2. Settlements.

A. Dry built, stone-walled enclosures, containing more than one court or apartment, and distantly or closely associated with sepulchral remains, extensive walled enclosures, or outlying stone walls.

### *Seathwaite Stone Walls.*

Like Scrow Moss, the irregular shape of this enclosure can be best understood from the plan (Fig. 6); it is situated in Long House Close, Seathwaite, rather less than half-a-mile north of the Walney Scar Road, where it comes close to Long House Beck in its descent to Seathwaite Valley. The construction of its walls seems to have been similar to those at Scrow Moss and Stone Rings, but they are better preserved, being in places still 6 feet high, and varying from 2 to 4 feet in thickness. Besides the court or yard, there are three or four chambers upon the wall. That on the north is somewhat square, with rounded angles. The double chamber upon the west is of peculiar construction, having upon the exterior of its west and south sides a sort of plinth or offset, being, in fact, a rude bench about $3\frac{1}{2}$ feet from the ground (see section). The total height of this wall on the west is 6 feet, but is seemingly a revetment, as it has an elevation of only 3 feet in the interior. It contains two apartments, or small chambers, square, with rounded angles.

The larger quadrangular chamber on the south has apparently contained a smaller enclosed chamber within it, with very narrow passages left between the walls of the two. It is, however, badly preserved, and rather obscure in plan.

These two double chambers flank the main entrance, and from the sides of that first mentioned there are traces of a stone wall running towards the opposite angle of the yard. A streamlet running through the enclosure forms a fair natural water supply.

Its position bears very considerable analogy to that of the Scrow Moss enclosure, and therefore is not strong. In one way, however, it possesses a peculiar strength of its own. The surface of the ground, and slopes all round it, are entirely covered with natural rocky *débris*, so rough to walk upon that an attack, even from the high ground immediately east, would be a matter of great difficulty. This *débris* has been in a great measure cleared within the enclosure.

Up the rocky slope on the north-east, which is very steep, runs a wall leaving the enclosure near the chamber, and apparently built over a stream. Another wall leaves the south chamber, and runs for a considerable distance in a southerly

direction, at one point forming a revetment. These two walls may, perhaps, at one time have formed a large enclosure.

About two-thirds of a mile south-west-by-west, on the opposite side of the stream, there are marked on the 6-inch Ordnance sheet, more "ancient stone walls," which, however, appear to me to be of comparatively modern construction, as many of the stones are squarish, and have, I believe, been quarried for the purpose. I am inclined to think that this is ancient sheepfold, but close by there is another small hut-like enclosure of what seems to me ancient construction, being built of rough unquarried and unsquared stones of very similar construction to the enclosure just described. (See II. Miscellaneous.)

In other parts of Long House Close, and about the side of Walney Scar generally, may be observed foundations and traces of ancient enclosures of various shapes, square, ovate, and some of conjoined rectangular figures. These may in some cases be sheepfolds of ancient date.

No cairns have been observed in the immediate vicinity, but the Long House enclosure is about two miles north-west of the remains at Bleaberry Haws, and the same distance west-north-west of the Torver Beck group.

*Heathwaite Fell.* (Arch. 31; Barb.; C. and W. iii.)

This, by far the most extensive and interesting group of remains of this class, has been hitherto, to all intents and purposes, ignored. The references above will show the scanty attention which has been paid to the settlement. One curious thing is recorded by Jopling, namely, a local tradition among the old inhabitants that giants formerly lived at the place, and were buried there. The last of the race was said to have been shot with an arrow upon the adjacent hill of Blawith Knott. A similar tale to this was told me in 1888 on the spot by a man cutting brackens.

The site selected for the settlement is an oblong and somewhat triangular elevation of moorland, rather over half-a-mile long from Knott End Moss on the south to the apex of the walls upon the north, and some 700 yards wide from Birk Bank Moss upon the east to the western limit of the walls. The highest point of it is about 550 feet above sea level. (Ord. dat.)

It lies half-a-mile south-west of Blawith Knott (800), by which it is well sheltered from the north-east wind. The site is naturally strong upon the west, where it has a steepish slope to almost sea level; it is fairly so on the south-west, while on the north-east and south-east it is protected by large bogs, some of which have anciently been tarns. (Plate XXVIII.)

THE HEATHWAITE FELL SETTLEMENT.

*Reduced and adapted from the Ordnance Survey.*

This elevation has been encompassed by a dry-built stone wall originally 2 feet to 3 feet thick. Beginning at the north this wall runs along the west slope for about half a mile, when it turns east at a right angle, and crossing a small natural gorge, where there is a gap in the wall (probably the chief ancient entrance), it runs south-east for about a quarter of a mile across marshy ground, which divides the settlement from another hill called Knott. Close to here it abuts against the large morass called Knott End Moss, on the inner side of which the slope is very steep. This moss with Birk Bank Moss form the protection on this side, and between the two the wall is continued. On the north-east it is again found continued from Birk Bank Moss, and thus completes the outer defences. Besides the chief entrance on the south there are two gaps in the west wall, probably ancient.

The space thus enclosed has been subdivided into five or more smaller enclosures by cross walls, and each of these seems to have had a water supply of its own. The apex of the triangle has been cut off by a wall, and this encloses the north elevation of the hill. About midway along the west side another wall leaves the outer one, crosses the summit, and cuts off the west angle. On the centre of this wall is situated the "Homesteads," or headquarters of the settlement. Within this ward, and close to the Homesteads, is the largest pond in the settlement, called now Pewet Tarn.

Again, from the east side of the Homesteads another wall has been formed, which bends round and abuts against Knott End Moss, thus forming a southern ward. The remaining portion has also been subdivided by a wall running north and south, of which, however, portions only remain; and fragments of more walls are found in the western division.

The Homesteads are situated upon the south-east slope of the hill, and upon the cross-wall dividing off the western ward, which wall passes through it, forming one of the partitions. They consist of seven walled courts or yards, three smaller chambers, and two very small mural huts or chambers. The walls, which are composed of the usual dry-built masonry, are in most places 3 feet thick, but in some places rather more, and in the east wall of the western court from 6 feet to 7 feet.

The main entrance to these enclosures has been on the south, and there are many gaps, which seem to be ancient entrances, varying from 2 to 6 feet in width. Each outer court has at least one of these from the field, and also one or more internal gaps of communication with the other enclosures of the Homesteads. There are also traces of a ruined passage between the great east court and the west one. The mural huts are placed at the north-west angle of the west court,

and the south-west angle of the south court. The first is the most interesting; it is contained in a small rectangular block of masonry filling up the angle, and the

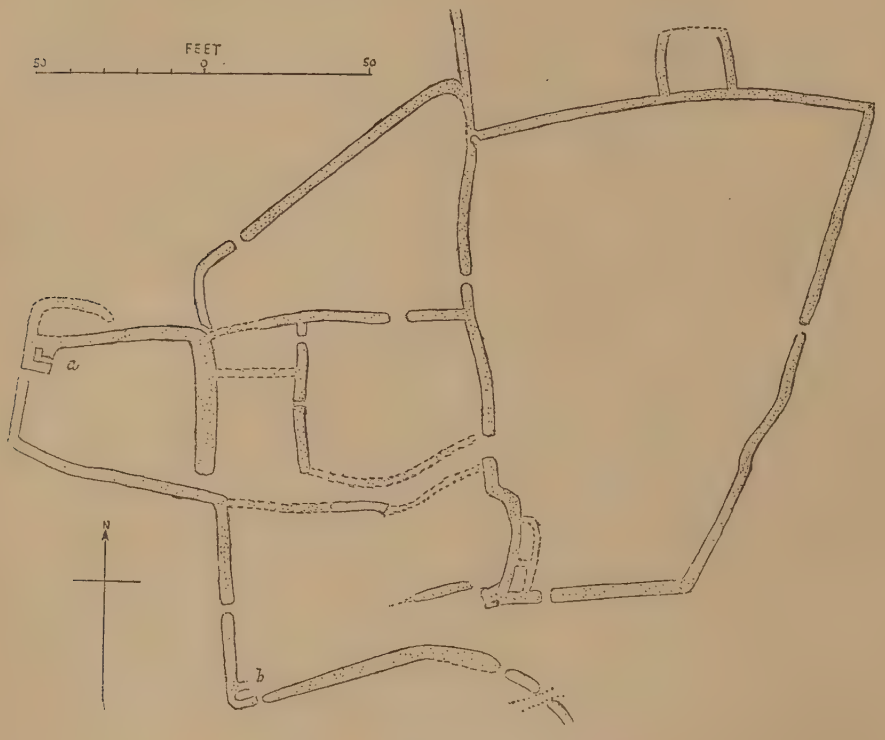



Fig. 7.—Homesteads, Heathwaite Fell.

plan of the chamber itself is that of a joiner's square (see *a* on fig. 7). The little entrance-passage, measured from the opposite wall to the entrance, is 5 feet 3 inches long, and the part at right angles to this is only 4 feet in length. The first named part is 2 feet wide at the entrance, and the latter 2 feet 3 inches wide. The walls at present stand about 4 feet high.

The other hut in the south court is more simple in plan (see *b* on fig. 7), consisting of a small straight chamber from 2 feet 6 inches to 3 feet wide, and is 5 feet in length. The west or inner end is rounded, and the wall batters a little inside like a couch. Its walls are at present 2 feet to 3 feet in height

It is of interest to compare these curious little huts with some at Ardudwy in

Merionethshire, which form the subject of an article in the *Archaeologia Cambrensis*, by Mr. Hugh Pritchard.[a]

Summing up, Mr. Pritchard says, "Of the huts described here, it will be seen that four of them are of the smaller class, measuring interiorly from 6 feet to 7 feet in length by 2 feet to 2½ feet in width, with a height from floor to ceiling of 2 feet to 2½ feet. These stand perfectly clear, and are quite unconnected with other buildings." He also describes some of similar dimensions as connected with courts and enclosures.

These Merionethshire huts are very similar in plan to, though seemingly all somewhat longer than, the first example I have just described. Mr. Pritchard considers them roofed dormitories or night retreats, and compares them with seamen's berths. Some of them are at the present day roofed over, which is not the case with either of the examples at Heathwaite Fell, but it is not improbable that these once were so, if not with flags, possibly with tree branches and heather. There is not room in the first for a man to repose, unless he did so with his legs in the entrance passage, and head and body at right angles in the other part; but the straight hut, being 5 feet long, may have been used thus, especially if the internal battering of the wall was intended to support the head and shoulders, in a rather upright position, something like an invalid's chair. Neither would hold more than one person with any degree of comfort, and altogether I am inclined to regard them as guardians' or watchmen's huts.

The other small chambers, three in number, are ruinous and badly preserved: one is outside the north wall of the west court, close to hut No. 1; another, which seems to have been square in plan, is outside the north wall of the east court; and a third, seemingly a double chamber, within the south-west corner of the same court. This last is close to the main entrance, and may have been a sort of guard room.

Within and without the outer wall of the settlement, in every direction, are cairns of all shapes and sizes; some long, some round, and a few roughly revetted with stone circles. Beginning at the north end, outside the *enceinte*, and around Beckhead Moss, these memorials are to be noticed in numbers; one, west of this moss, of oblong shape, has been opened,[b] and is called the "giant's grave." Outside the west wall the north-west slope is covered with them, and within it, just west of the Homesteads, is a large group, many of considerable size, and both

[a] Huts of Ardudwy, by Hugh Pritchard; *Archaeologia Cambrensis*, 4th S. xii. 27.

[b] Interments and a portion of a stone ring were found.

long and round in shape. Still inside the walls, and south of the Homesteads, and above Knott End Moss, is another large group, mostly round; and a short distance east of the Homesteads is a large and symmetrical round cairn, hollowed out to the natural soil at its centre, probably the result of excavation. Due south, nearly a mile distant, are others; and a patch about the same distance north-east, on the other side of Blawith Knott, is marked in the 6-inch Ordnance sheet, "White Borran."

It has been asserted that many of these are beehive huts fallen in; but I see not the slightest reason to consider this to be the case. Very few have been systematically examined.

On visiting this place on one occasion with our Fellow, Mr. C. W. Dymond, C.E., we noticed on the hill flanking the west side of the small gorge leading to the south-west entrance of the settlement, some curious artificially levelled platforms on the steep hillside. These, Mr. Dymond suggested, were slingers' platforms.

I have since found similar places on the high ground on each side of Knott End Moss, placed in an admirable position for covering the approach on the east side of the "Knott." They are, however, much more numerous in the first-mentioned place; and certainly command this dangerous approach to the settlement in a remarkable manner.

These platforms have been formed thus: on the steep hillside a small level has been formed, by excavating into the hill and turning out the material on to the side of the hill, like the rubbish heap from a quarry; in some cases this "tip" is (I think intentionally) worked up with stones, to make it stronger. The slope, but not the summit, of this artificial platform has now a special vegetation, namely, a small fine heather, while the hillside and top of the platform are either grass or brackens. Some of the platforms measure on the level part 12 feet long by 8 feet wide; but others are much smaller. They are placed with intervals between them, which, if Mr. Dymond's surmise as to their use be correct, may have been to allow room for the full play of the sling.

The strength of this settlement is in one sense considerable, placed as it is upon a ridge of moor high above sea level. But the position of the Homesteads is incapable of defence, being immediately commanded by a hill. It is, in fact, the dwelling and burying place of a primitive community, with its attendant cemeteries and large enclosures for various purposes, and in no sense a fortification. The strategical strength of the place has, however, been evidently well considered; as is evident by the method of utilising large morasses or tarns for defence, and the excellency of the water supply.

The other remains in the vicinity are the square camp, already described, half a mile south, perhaps a garrison to the settlement; cairns, ring mounds, and a singular basin-like excavation from 1 to 1½ miles south-east; and the remains of a large stone circle 2½ miles south-east.

There is also a large cairn and ring mound 2½ miles south, a mile further south of which it is interesting to notice an estate called Rathvale, and close by a Rathmoss.

*Dunnerdale Fell.* (C. and W. iii.)

We have here a place similar in design to, but much smaller and inferior in every way than, Heathwaite Fell; the place of the central Homesteads being taken by a solitary and small walled enclosure. Its site is very similar to that of the Long House Close settlement, being placed upon the slope of Dunnerdale Fells, east of the river Duddon, at an elevation of about 530 feet (fig. 8).

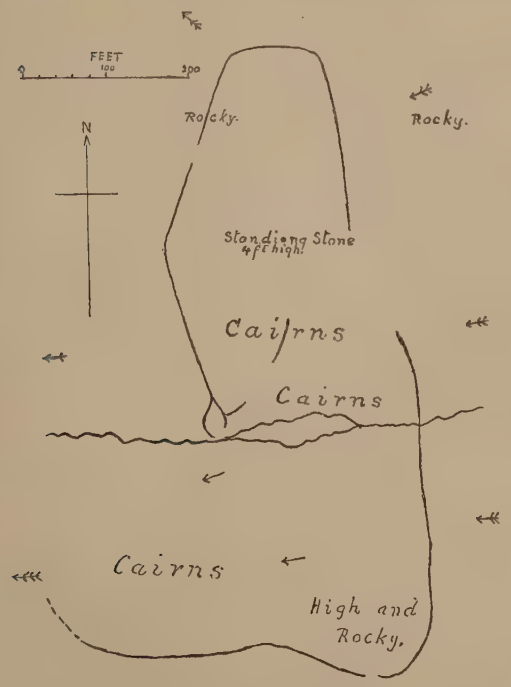



Fig. 8.—Dunnerdale Fell.

Beginning from the small enclosure the wall runs north, passing over a rocky eminence; here it bends east, and, after about 100 feet, it makes another turn back south. Some way along this side it becomes lost, but is apparent again further on. At about 800 feet from the north-east corner it turns west and runs down the side of the hill, where it becomes gradually lost.

Besides the small enclosure, the walls of which still stand about 4 feet high, there are within the *enceinte* many cairns, remains of walls, and one standing stone.

From the east side the rise is very steep to the summit of Great Stickle (1000 feet). On the west and north-west are steep downward slopes to the

Duddon. Near the south-east corner are many cairns; Mr. Clifton Ward noted a circular group. Due south are many more; and near these is the dry bed of an old tarn, very stony, south of which, again, are more cairns and foundations. A stream running through the large enclosure makes a fair water supply. The gap in the south wall may or may not be an ancient entrance, as a cart track now runs through it.

The site of this settlement was, at the time of my visit, covered in every direction by large and thickly-grown brackens, which entirely precluded a satisfactory examination of it. The plan given here is therefore nothing more than a sketch plan partly taken from the 6-inch Ordnance sheet, and partly from such notes as the condition of the remains enabled me to make.

I observed no signs of entrances flanked by chambers, or of circular foundations, but beneath the brackens were many foundations of walls, etc. of which it was impossible to make out the plan.

This settlement is over four miles south-west-by-south of the Long House Close stone walls; a similar distance south-west-by-west of the Torver group, and three miles north-east of the fine megalithic circle at Swinside in Cumberland; and about four miles north-west-by-west of Heathwaite Fell.

About the same distance north-west on Birkby Fell, near Devoke Water in Cumberland, are the remains of another large settlement, very similar in character to Heathwaite Fell, which goes by the name of Barnscar, and concerning which there is much local tradition. It will be of interest to compare this with the Furness examples, especially the two last described.[a]

### B. Composite Enclosures of anomalous form.

*Urswick Stone Walls.* (W. F. 395; Arch. 31; Barb.; C. and W. iii. xxvii.)

These very curious remains are situated upon an eminence a little over half a mile west of Urswick church; and, in consequence of their accessibility, have, unlike most of the High Furness enclosures, been the subject of more than one detailed description. All of these are, however, in a greater or less degree unsatisfactory, and a considerable amount of speculation and vague theory has at different times been wasted on these structures. As it is undesirable to extend these pages with long extracts I must content myself with a simple description of the remains, and such references to former descriptions as are absolutely necessary.

[a] See *Barnscar; An ancient settlement in Cumberland*, by C. W. Dymond, F.S.A. C. and W. xii. 179.

The wall foundations which can be examined at the present day are apparently portions of two enclosures (fig. 9). I say apparently of two, as portions are now

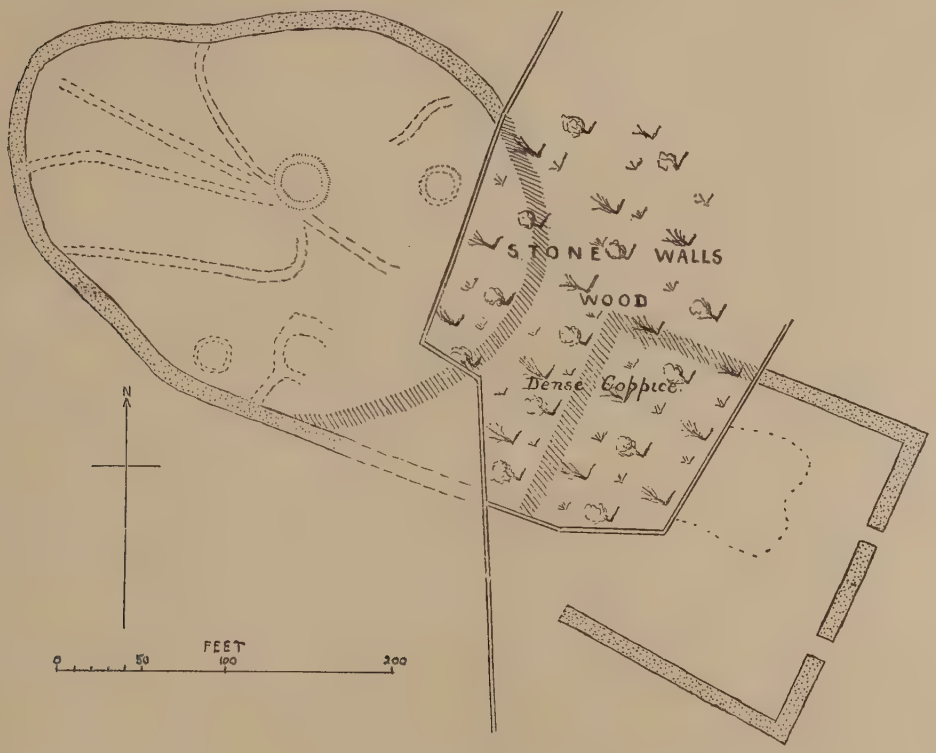



Fig. 9.—Urswick Stone Walls.

contained in a copse wood of such density that it is impossible to examine or even trace them. The first, that nearest to the village, consists of three sides of a rectangular enclosure, the ground within which slopes gently to the south-east. The walls, of which the foundations only remain, are about 10 feet in width. On the south-east side are two openings or entrances. Immediately north-west of this and at the other side of the coppice (see plan) can be traced a very singular-shaped enclosure. It consists of a somewhat oval-shaped space surrounded by the remains of a wall of similar thickness and construction to that of the square. The interior, which slopes gently east, has confused and ill-defined remains of walls which appear to have divided this space into different compartments. Near the centre there is a ring-mound nearly 30 feet in diameter, and there seem to be

remains of two others of smaller size to the south-east. All these have been represented on the plan as accurately as is possible from their confused condition. Close and Jopling have left plans of these remains, both of which are inaccurate, representing the oval enclosure as nearly round; the north points are incorrect, and in Jopling's plan the confused interior is represented something like the nave and spokes of a wheel, to which it is indeed likened in the text.

The portions of the walls shown in the present plan by hatching are continuations of the walls within the wood, as represented in these two plans. It will be seen that at the south side of the oval I represent the wall proceeding in a straight line, and not coinciding with Close's arrangement. At this point it is badly preserved, and a good deal overgrown; but I think my observation is correct, and, if so, had I not seen Close's plan, which seems to have been made before the present wood was thick, the idea would have suggested itself that possibly oval and square formed parts of one enclosure. But Close's description proves that in his time the wood was at any rate thin enough to allow some sort of examination. The construction of the walls is very peculiar. They are apparently formed by fixing long stones edgeways in the ground, about 10 feet apart, and filling in the interior with smaller stones. They are limestone throughout, and as the hill is everywhere covered with masses of carboniferous limestone, there was no difficulty in obtaining the material.

To the north-west of the oval there is an abrupt fall, and to the south-west a hollow, which Close states was by report formed in mining operations.

There is some reason to believe that it is only in quite modern times that the walls have been reduced to their present condition, which appears to have been caused by their demolition for building material. Jopling states that this was the case, and at a meeting of the Cumberland and Westmorland Antiquarian Society in 1877, Mr. John Fell read some particulars obtained from a man who stated that he had worked at their demolition thirty years previously. This man described the wall as then averaging 2 feet in height, a rough construction of various sized stones, and the inner circle as being surrounded by upright stones almost perfect, with space for two entrances. The stones of the circles did not exceed 4 feet above ground, and were upright unquarried limestone slabs. A spear and brass (?) axes, with holes through them for shafts, and some curious rings of the same metal were found 150 yards distant.

This account, however, appears very unreliable. How comes it that if about 1847 the centre circle was such a conspicuous object, Close, who made his plan forty years before, entirely ignored it? To be sure he found this part "in a great

measure covered with wood," and difficult to trace, yet his plan shows the interior walls much more correctly than Jopling's, which was made in 1844, so it is unlikely he would have omitted the inner circle, unless it was, as now, an ill-defined stony ring. Also, if the outer wall had not been nearly as ill-defined as at present, he would probably have left us a more accurate representation of it.

Jopling describes also a "partial enclosure of a natural terrace of rock," about a quarter of a mile north. If this ever existed, the stones have been removed. A limestone mass, which the same writer describes at the same place as a cromlech, has every appearance of being natural. The same remark will probably apply to something similar mentioned by both Close and Jopling between the oval and the square.

These remains are very curious and extremely puzzling, and it is much to be regretted that they are not in a better condition. I would point out that the construction, design, thickness of walls, and general dimensions of the oval, approximate very closely in character to the Celtic cashels figured in Anderson's *Scotland in Early Christian Times*.[a] Especially should it be compared with the ground plan of the Innismurry cashel.

These cashels were of Pagan origin, although they often included an early Christian settlement, and in consequence are often found to contain the foundations of small square Celtic churches.

Urswick stone walls should be also compared with a curious and interesting structure near Kirkby Lonsdale, which forms the subject of a paper by the Bishop of Barrow-in-Furness (Canon Ware).[b] There is a remarkable resemblance between the two in shape, the broad enclosing wall, the interior dimensions, and the central bee-hive hut.

The square at Urswick is even a greater puzzle, but though so badly preserved, the present appearance of its walls suggests a similar construction to those of the oval, and therefore it is possibly of the same age.

Both Dr. Barber and Mr. Close compare Urswick stone walls with Mayborough, near Penrith; with which, except as regards dimensions, they have nothing whatever in common.

The great difference between the type of these remains and the High Furness enclosures should be noticed.

[a] *Scotland in Early Christian Times*: Rhind Lectures, 1879 (Edinburgh, 1881), p. 87.

[b] A British Rath at Kirkby Lonsdale, by the Rev. Canon Ware, M.A. *Transactions of the Cumberland and Westmorland Archaeological and Antiquarian Society*, vii. 111.

## II. Miscellaneous.

### A. Dwellings.

Throughout the Fell country over which the settlements described are scattered, are found numerous dry stone walled enclosures of much smaller dimensions, many of which are probably sheepfolds and shelters of various dates. On the other hand, it is very probable that some of them are isolated huts of the same period as the larger enclosures near which they occur. It would be useless to plan accurately, or to describe in detail, such rude and doubtful structures; but as in some cases the character of the masonry appears to be identical with that of the settlements, it may be of use to describe one example:

#### *Seathwaite.*

Rather more than half a mile south-south-west of the large enclosure at Long House Close, on the other side of the stream, is a curious hut-like construction, which has been already mentioned. From the character of its masonry it is possibly coeval with the adjacent settlement, and is perhaps an ancient hut-like dwelling.

This little place consists of a small outer court of irregular shape, some 15 feet long, and rather more wide, with an entrance to the south. North of this, and connected with it by a tiny entrance, is a chamber of a roughly square plan, about 8 feet long by 4 feet wide. The walls, 2 feet to 3 feet in width, and ruinous, are of the same rough masonry as the settlements, and are composed chiefly of stones unsquared and unquarried, which is not the case with the adjacent structure marked in the 6-inch Ordnance map as "Ancient stone walls," but which appears to be an ancient sheepfold.

The little entrance connecting the two apartments is only 18 inches wide and 20 inches deep, and is covered by a lintel flag, still in its place.

These minute dimensions may be used as an argument against the theory that it is a human habitation. But I would point out that the passages in the Wideford Hill Pict's house in Orkney[a] are only 15 inches high and 22 inches wide, and also that some in an earth-house at Kinord, Aberdeenshire,[b] are only 16 inches

[a] Wilson, *Archaeology and Prehistoric Annals of Scotland* (1851), 86.

[b] Anderson, *Scotland in Pagan Times*, 291. Other passages are found 17 to 24 inches deep and 21 to 28 inches wide.

deep and 20 inches wide, even a more awkward space for a man to scramble through.

### B. Sepulchral: Cairns, Tumuli, Stone Circles, Ring Mounds.

(C. and W. ix.; Arch. 31; W. F.; Barb.)

#### Cairns.

It is unnecessary to enumerate the various positions in which these memorials are to be found, as this can be ascertained in nearly all cases from the 6-inch Ordnance sheets. They are of all sizes, varying from 5 or 6 feet in diameter to 90 feet, which is the diameter given by Jopling to a large one on Kirkby Moor, which he partly examined.

They also vary very much in depth; some being flat and only about a foot, and others probably 5 or 6 feet, deep. At Heathwaite Fell long cairns occur; but I do not think they have been noticed elsewhere in Furness. A few are rudely revetted by a containing circle of stones, but the circle is not as a rule very regular. Many have been tampered with by shepherds in search of treasure, or ignorant excavators who have thrown the centre out, thus giving them an appearance that has led to their being considered beehive huts fallen in, which is not the case.

#### Tumuli.

Earthen burial mounds are very scarce in this district; I have, however, noticed one of medium dimensions not far from the small enclosure at Appleby Slack.

At Pennington is a large barrow, in all probability of the same age as the Anglo-Saxon earthworks close by, called "Pennington Castle Hill," which will be described with it.

West[a] describes a tumulus at Mountbarrow: "at a small distance to the east of Mountbarrow house appears a tumulus, but much defaced by the improvement of the ground it stands on." Baines, Whitaker, and Dr. Barber, all make mention of this, and the 6-inch Ordnance map marks a barrow of considerable dimensions, two fields east of Far Mountbarrow House; yet, on visiting the site, I was unable to detect any traces of a mound, artificial or otherwise. Possibly it has been improved away altogether.

[a] W. F. 9.

*High Haume, Ireleth.* (W. F. 345.)

This singular mount (fig. 10) is situated on an eminence, 500 feet above sea level, about halfway between Ireleth and Dalton in Furness. The place is sometimes called "the Beacon." In Close's edition of West's *Furness* there is some description of it, and the extensive view from this point is there noted. The editor suggests that it was a look-out station for the supposed Roman station at Dalton, and formed for the especial purpose of conveying intelligence across Morecambe Bay.

Fig. 10.—High Haume, near Ireleth.

This circular mount is in form a truncated cone, the summit of which is not, however, level, but rather hollow, and sloping to the south-east; where there has apparently been a way up to it. There appears, by the stony character of the summit, to have been a rough parapet, or some sort of building upon it. The ditch which encompasses the east side is deepest (about 4 feet) on the north-east. It becomes fainter as it approaches the south, and is just visible on the west side of the entrance. On the west and north-west there is no ditch, the mound being here placed on natural rock, and much stronger. The ditch is also widest on the north and north-east, where it seems about 10 feet across at the top. The sides of the mound are highest on these sides, apparently about 12 feet on the north-east, and are, seemingly, wholly artificial. On the south-east the height seems about 10 feet; and next to the entrance, upon the same side, about 7 feet.

On the west and south-west it is also very steep and high (apparently 12 feet or more), but here it is not wholly artificial, natural rock showing upon its face to a considerable height. As a matter of fact the mound has been raised on a natural platform of rock, and this side forming a low precipice required no ditch, *i.e.* if it was indeed a defensive place. The ground, however, on the south-west side, though much lower than that on the east, is fairly level. On the north-west side there is a steep slope, and at about 40 yards distance in this direction there is a precipitous fall to the west. The mound is chiefly composed of earth.

Immediately in the vicinity of this place, some time ago, four stone celts were found together, and about a mile north a remarkable discovery of eight ancient urns took place. These were apparently British, and ranged in a line north-east and south-west.

Close has noted the extensive views from this point. To the north rise the Lake Mountains, prominent among which is Coniston Old Man, an ancient beacon hill. To the west, Black Comb, another beacon; and the Duddon Estuary, up to Broughton-in-Furness, and the sea. To the south Dalton, Walney Island, Barrow, and seaboard by Aldingham, and to the east Birkrigg, and the Kent and Leven Sands.

From its strong position and the fact of its being ditched, although on such a small scale, I was at first inclined to believe this mount to be a small defensive fort, but not improbably it is in reality nothing more than a burial mound. The common opinion, that it is a "beacon," however, is also extremely probable, and I am inclined to think it has been mutilated and built upon for this purpose, and that the stony foundations upon its summit are indeed the remains of a beacon or semaphore station, possibly of Roman date, for the use, as Close suggests, of the Roman station of Dalton.

## Ring Mounds.

Remains of this class occur in several parts of Furness, and, as similar embankments have been proved in some districts to be sepulchral, I think it best to describe them under that heading here. I am not aware, however, that any in this district have been examined. They usually consist of a low bank of stones and earth (from 5 to 10 feet wide) cast up into a ring or circle, which varies from 40 to 100 feet in diameter. Some have slight ditches formed in the construction of the ring, and some have gaps or entrances, apparently ancient. They seem too large for hut circles and too small for encampments.

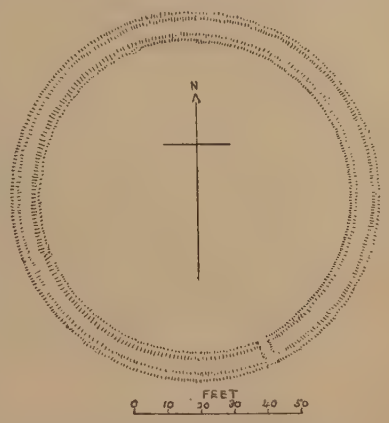



Fig. 11.—Ring Mound, Hare Crags, Torver.

### *Bleaberry Haws.*

Rather over 200 yards north-east of the embankment, where it makes a right angle, is one of these circles 53 feet in diameter. The circle is not quite regular and has no entrance.[a]

[a] Marked in the 6-inch Ordnance map as "circle."

*Hare Crags, Torver.*

This example is about two-thirds of a mile east of the last, and may be said to be circular with a diameter of 100 feet (fig. 11). If, however, the circle be bisected by a line taken through the west side of the entrance this line will be found to measure 102 feet from centre of mound to centre, all the radii west of it 51 feet, and all east 50 feet.

The embankment itself is about 6 feet wide, with an interior and exterior depression of about $1\frac{1}{2}$ feet each, the total width therefore being 9 feet.

The ground rises to this ring all round, and the ring itself encompasses the summit of the hill, the ground within the ring being higher than the bank itself. The little gap to the south-east may be ancient or modern.[a]

*Torver Beck.*

About 100 yards south-west of the Torver Beck enclosure, on the opposite side of the stream, is another about 54 feet in diameter, badly preserved, without entrance or trenches.

*Bannishead Mire.*

About halfway between Torver Beck settlement and that of Scrow Moss, near the rifle butts, is a ring mound 48 feet in diameter, with a bank 9 feet wide; it has no trench.[b] Mr. C. W. Dymond points out to me that this example is raised on an artificially levelled platform on the gently sloping surface of a hill. On the south-east is a break in the ring, which may be an entrance, but is more probably a break-down or natural earth-slip. Probably none of these embankments are more than 2 feet deep.

*Goathwaite Moor.*

Rather more than a third of a mile west and rather less than two-thirds of a mile north-west of Goathwaite respectively, are two remains marked in the 6-inch Ordnance map as "circle of stones (supposed British remains)." The most southerly of these is a ring embankment 38 feet in diameter, and the other seems to be a large flat cairn with containing circle, which however is barely noticeable.

[a] Not marked in the 6-inch Ordnance map.

[b] Marked in the 6-inch Ordnance Survey as "circle."

*The Kirk, Kirkby Moor, near Gill House Beck.* (Arch. 31; Barb.)

The Kirk is a ring embankment 75 feet in diameter, of earth and stones, about three-fourths of a mile south of Kirkby slate quarries. The width of the ring is 6 to 10 feet, and its depth about 2 feet 10 inches. It has what seems to be an ancient entrance 6 feet wide on the south-east. The ground within the circle is level. A large cairn (opened), which has already been referred to, lies about 350 yards north. Jopling has given plans of circle, cairn, and cist, all of which are conventional and useless. Outside the circle, on the north, he shows four stones set in a square, forming a sort of rudimentary avenue. The following seems to be his only authority for this:

At a distance of twenty paces rather east of north are two small stones set edgeways in the ground, about 9 feet apart, and ten paces further two more 4 feet apart. These point, not at the centre of the ring, but at its eastern side. Twenty paces further north are two others 4 feet apart, placed at the same angle to the circle, but not in the same line as the others. All these stones are artificially placed, the two last named being 2 feet above ground, the others less. One or two are mere flat slabs, set on edge. It seems possible that they are the remains of two small avenues of rough stones parallel with each other.

There is no appearance of true megaliths having ever surmounted the ring; but one or two small flat stones, about a foot above ground, still stand. A venerable inhabitant of the parish informed me that stones of this description, from one to two feet in height, did, within his memory, stand on the whole of the circumference. Jopling corroborates this. This then appears to be an intermediate type between the megalithic circle and the ring embankment.[a]

Jopling chronicles one or two remarkable traditions anent the Kirk. According to one "it was a place where their forefathers worshipped," and a boggy place close by is "Kirk Sinkings." A more curious thing is that games were held at this place by the lord of the manor at Easter until comparatively recent times.

*Coal Ash Grizebeck.*

Dr. Barber mentions a segment of a circle here. On visiting the place I found a somewhat horse-shoe shaped embankment, now hardly noticeable, 67 feet in diameter.[b]

Another "circle" is marked in the 6-inch Ordnance map, just east of Yeat House, in Woodlands, and therefore not more than a mile from the Heathwaite Fell Settlement. This is not to be found, and is probably a disturbed cairn.

[a] Marked in the 6-inch Ordnance map as "Druidical circle."

[b] Not on 6-inch Ordnance map.

Dr. Barber also mentions a destroyed "circle" on Osmotherley Common, and one on Lowick Beacon. This last I was unable to find, but there is a cairn marked on the spot on the 6-inch Ordnance map.

A "circle" is also marked on Monk Coniston Moor, which Mr. Clifton Ward mentions as a "stone circle." The site being within half an hour's walk of my home, I have searched for this carefully, perhaps a dozen times, without ever being able to find it. Whatever it has been, I think there can be little doubt it is now destroyed, probably for walling.

Yet another "circle" appears in the 6-inch Ordnance map in Broughton Tower Park. The actual site is not indicated in the map, but it must be either in a thick copse or a corn field; it is probably a small ring mound or a thrown-out cairn.

### c. Religious? Circles of Stones.

*Sunbrick.* (Arch. 31; Barb.)

This is situated on Birkrigg, rather more than a quarter of a mile east-north-east of Sunbrick, and rather less than half a mile south-east-by-east of the enclosure at Appleby Slack. It is on the brow of a hill overlooking Bardsea and Morecambe Bay. It is a double concentric circle of limestone blocks, and the only remains of true megalithic character in any preservation in the district.

Jopling gives the number of stones in the inner circle as twelve; in the outer, uncertain, perhaps nineteen or twenty. The diameter of the former is 30 feet, of the latter 90 feet. The inner circle, according to Dr. Barber, is about 24 feet in diameter, and the outer has thirteen unhewn stones placed upright in the ground. My own observations of this year give an inner circle of eleven stones, and an outer of apparently thirteen, but the number in the latter is hard to ascertain, as some are undoubtedly destroyed, and others are buried, or nearly so. I also found the diameter from the centre of an outer circle stone on the east, to a similar point on the west, to be 88 feet, and measuring the same way north-west and south-east 75 feet. In both directions the inner circle was 26 feet, but apparently it is not in the centre of the outer circle.

Three stones in the inner circle stand about 3 feet high, and the rest are of no eminence or prone.[a]

*Knapperthaw.*

Rather more than a quarter of a mile north of Knapperthaw, in Lowick,

[a] Marked in 6-inch Ordnance map as "Druidical temple."

are the remains of a stone circle, which has been erected on a stony ring embankment or platform. On the north-west side of this still remain five stones (which have probably never been upright), of small size and in close order. No others remain, although the sites of some can still be traced. The extreme diameter of the ring is about 100 feet, but as it is about 9 feet wide, and as the only large stones that remain are upon its inner side, the diameter of the stone circle probably did not exceed 90 feet. There appear to be some vestiges of an inner chamber on the north-west, and on the south-west is an entrance or gap in the ring, probably ancient.

This circle is between two and three miles south-east of the Heathwaite Fell settlement, between which and it are the Goathwaite ring mounds.[a]

*Bleaberry Hawes.* (C. and W. ix.)

On the top of the hill close to the rampart is an interesting little relic of this class, being a little circle, or rather ovate ring of seven stones, 17 feet in diameter from north to south and 13 feet from east to west. There is a gap on the north-west side, and the circle may here have been completed by one or two more stones, but if so no sign of them exists. The stones are local and none more than a foot above ground. This circle I caused to be dug into, and a rough pavement of cobble stones was found at a depth of 2 to 3 feet, resting upon natural rock.

Doubtful.

A short distance north of the "large flat cairn, with containing circle" on Goathwaite Fell, mentioned under the head of ring mounds, and just east of Great Burney Hill, is a large cairn, and north-east of this, at a distance of about 100 yards, is a singular bowl-like pit 25 feet in diameter and 5 feet deep. This is marked in the Ordnance map as "Basin," and is about a mile from the Heathwaite Fell settlement. It is the only thing of the sort noticed in Furness, and is perhaps a rude type of dwelling. It is difficult to say where all the excavated material has gone to. Its position is in a narrow and well-sheltered pass.

General Observations.

On carefully examining the Ordnance map it will be noticed that all these

[a] Marked in the 6-inch Ordnance map as "Druidical circle."

settlements and their attendant groups of sepulchral and other remains are situated upon the fells, and not in the dales. Those in Low Furness, namely, the Urswick stone walls and the Birkrigg camps, are between two hundred and three hundred feet above sea level, while the dry stone walled enclosures of High Furness vary from 500 to 1,000 feet. These are in general placed on the sloping sides or lower summits of the heath-covered fells.

From their elevated position it would seem that difficulty of access was to a great extent observed in the choice of a site. This, however, becomes less noticeable when it is seen that the various structures are placed upon equally elevated portions of the same fells; and from this it may perhaps be inferred that they (the High Furness group) were the habitations of the same or kindred tribes, who did not consider it necessary to defend themselves against their neighbours.

It is, however, presumably reasonable to suppose that other similar structures upon the lower ground may have been entirely obliterated in the progress of agriculture. But, if this was the case, it is difficult to account for the fact that no vestige of them remains, or to understand why the bleak fell tops were chosen at all, when as strong, or stronger, positions could have been found on the lower elevations. A not improbable explanation is that all the lower ground was at that remote period covered with such a dense scrub and jungle as to render it useless for residential purposes.

Of an actual defensive system there is no trace. They are not, as a matter of fact, in any sense forts. This is clearly proved by the actual situation of the "Homesteads" themselves, which in no case occupy a hill summit, but the sloping sheltered side of a mountain or some elevation on the fell. They are in fact clearly the abodes of an extremely primitive community, who, although they found it necessary for some reason to choose an elevated site, had no need, or more prebably no knowledge, to defend it by artificial means.

It is to be noticed that with the exception of the embankments at Bleaberry Haws, and Hawkshead Hall Park, and the ring mounds, the works are chiefly of dry built masonry.

Considering the material and the fact that few of the stones seem to have been quarried or even squared, these walls evince a certain amount of rude skill. At the present time they stand in places from 5 to 6 feet high, though this is exceptional, their usual height being now from 1 to 4 feet; and in many places, of course, they are quite ruinous. Their width has been usually from 2 to 4 feet.

It is not probable that these walls were ever of any considerable elevation,

although in some places they have been despoiled for enclosing the fells. In other cases, however, they occur where this can hardly have taken place, yet here they have no greater elevation, nor is there enough *débris* about to have formed a wall of any magnitude.

The plan of these settlements is interesting; some of the smaller courts and enclosures no doubt formed the living apartments of the inhabitants, and probably have been covered in by some method, although in none, even the smallest, is there any trace of roofing remaining. The larger enclosures were probably yards or kraals for domestic animals, or for the lower orders of the tribe itself.

The use of the large attendant enclosures, and also of the single ramparts, is obscure, but it is probable that none are defensive, and some may have been only boundary lines.

As a rule these people, whoever they were, seem to have buried their dead close to their homes, as the cairns and ring mounds in the vicinity testify. Such of the former as have been examined have revealed interments of the most primitive order, consisting as a rule of a deposit of burnt bones, sometimes contained in a rude stone cist, and without, as far as I can ascertain, any trace of metal or art workmanship, except rude fragmentary pottery.

The similarity of the construction of the Urswick stone walls, and perhaps of the Birkrigg enclosures close by, to that of the Celtic cashel, I have already called attention to; at all events they differ in all particulars from the High Furness group, and in the stone walls and Holme Bank enclosure more attention seems to have been paid to true defence, neither being immediately commanded by higher ground and the latter having a slight ditch. It is impossible to guess at the present day to what height their walls may have originally reached. They have, however, the appearance of being the work of a more advanced community, and it is of interest to note that bronze weapons have been found close to Urswick stone walls. The propinquity of the concentric stone circle near Sunbrick should also be observed.

Very little can be learnt from the present nomenclature of these remains. Many of them seem to have been locally known simply as "the old stone walls." The places where they occur have almost invariably Anglo-Saxon or Scandinavian names.

Tor, however, occurs in Torver, which district has evidently been a place of importance in these primitive times, and the Celtic Rath in Rathvale and Rathmoss, which places are in the neighbourhood of ancient remains, although I

believe there are no primitive structures existing on those sites themselves. Kirk is a common term in Cumberland for a stone circle.

## III.—Post-Roman and Anglo-Saxon Earthworks.

### *Aldingham Moat Hill.* (C. and W. ix. 409; W. F.)

This place, which has formed the subject of a good deal of local controversy, is without doubt an example of the moated mound or "burh" of an Anglo-Saxon lord, and dates perhaps from the ninth or tenth century. As it has recently been made the subject of a paper by Chancellor Ferguson, F.S.A., who was indeed the first to point out its true origin, I will deal with it briefly.

The earthworks consist of three divisions (fig. 12). Firstly, we have close to the modern farm a rectangular camp, which is not, however, an exact square, and the interior of which is not flat, but rounded and humpy, "heightened," no doubt, as Chancellor Ferguson says, "with the earth from the ditch around it." This ditch is from 36 to 40 feet wide, and originally perhaps 4 or 5 feet deep, a formidable defence for an enclosed space which is barely 100 feet square. It is now wet on the north and west sides, and marshy elsewhere.

Proceeding from here due south up a gentle slope we come at about 100 yards to a broad and straight piece of ditch, which runs in at almost right angles from the sea cliff for a length of about 250 feet, when it abruptly terminates. It is about 18 feet wide at the bottom, and has a diagonal entrance across it, from which a slight artificial scarp runs in the direction of the farm parallel with the cliff. It is doubtful if the entrance and scarp are ancient.

South again of this ditch, and separated from it by about 40 yards, stands the moated "burh" itself on the very edge of the sea cliff. The ditch and part of the mound on the south-west have been apparently washed away by the action of the sea, which is known to have made great encroachments here. Otherwise the burh is of fairly regular shape. It is about 30 feet high, and about 96 feet above sea level. The ditch is about 10 feet deep on the south side, 8 feet on the north, and varies from 15 to 20 feet broad at the bottom.

This is the hame or fortified mound of the Aldingas, who must have been an Anglo-Saxon clan settled in these parts. The straight ditch is probably part of a defence which, as in other similar sites, would surround a base court, and has been perhaps washed away at one end and filled in for agricultural reasons at the

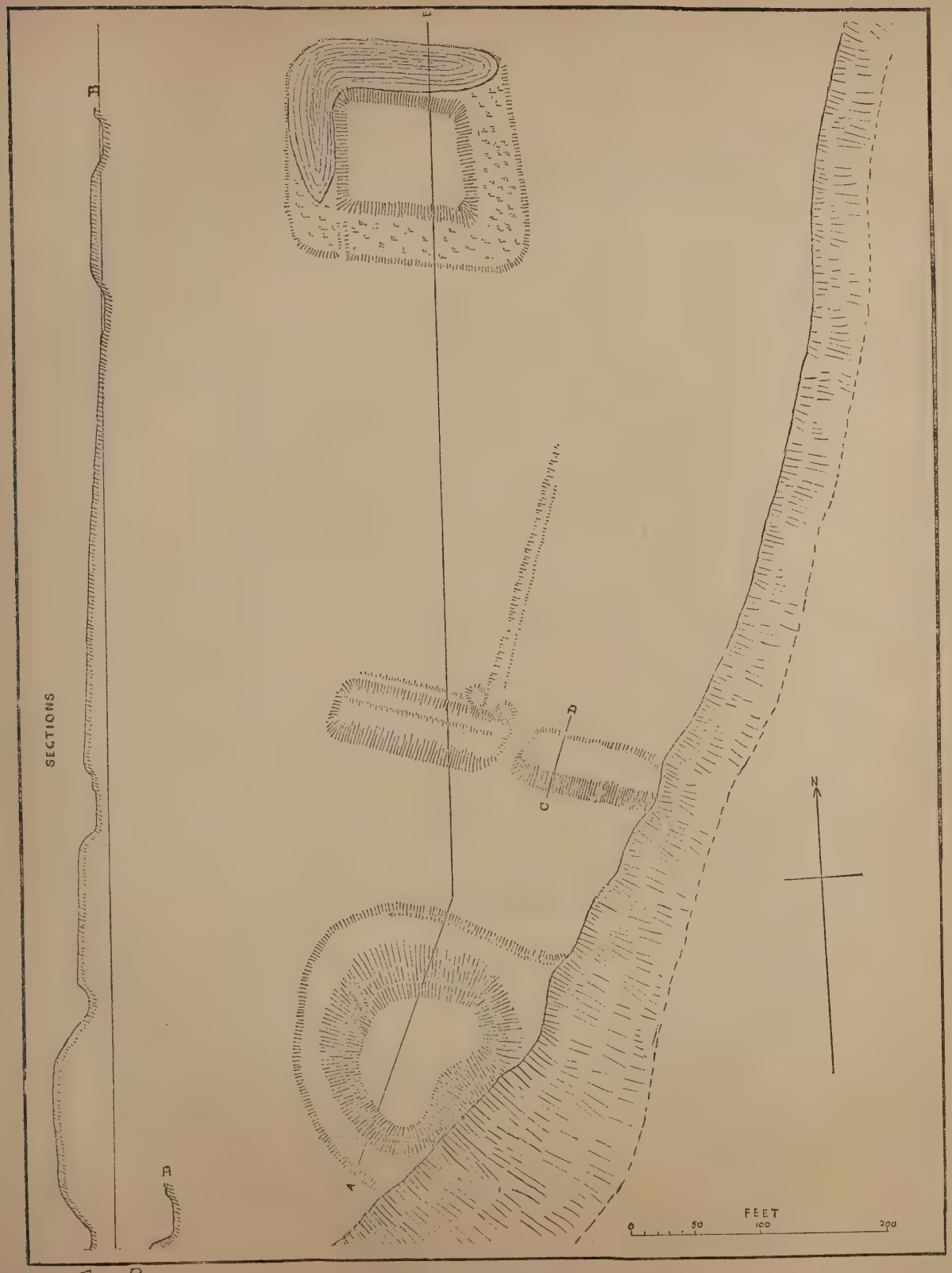



Fig. 12.—Aldingham Moat.

other. The Chancellor further suggests that the mound was the *caput* of the manor of Aldingham, and that for shelter the lords removed their wooden house to the square camp, which, according to tradition, is the site of Aldingham Hall. In later and richer days they abandoned the place altogether and built the adjacent castle of Gleaston.

This explanation of the square is probably the right one, though I am not aware of any other example of a quadrangular earthwork in proximity to and apparently of similar age as a burh. It seems to me just possible that it was the meeting place or folk-moot of the Anglo-Saxon settlement. But the wide ditch militates against such a theory.

*Pennington Castle Hill.* (W. F.; Barb. etc.)

This earthwork (fig. 13), which has been described by Close[a] as an "octagon or square with obtuse angles," by Baines and Whitaker[b] as "the foundation of a square building," and by Dr. Barber as a "large circular enclosure," is situated on the edge of a steep ravine, through which flows a stream called Pennington Beck.

The cliff on the east side of the stream, which here forms an elbow at about a right angle, has been isolated by a semicircular ditch and rampart enclosing a small quadrant-shaped area. This ditch is about 45 feet wide, measured from the summit of the rampart to its outer edge, and has always been dry. It has been encroached upon on the east by farm buildings. The rampart, which is loftiest on the north, seems about 12 feet high at that point from ward level. There are no signs of masonry in the ward or upon the ramparts. The entrance upon the south-east seems ancient; a path from it now leads to the farm. It may have been originally crossed by a wooden bridge over the ditch.

The precipices to the north-west and south-west are very steep, and may have been to some extent artificially scarped. There are no signs of a parapet now upon the edge; but I do not think it is the case, as has been stated, that part of the area has been destroyed by stream action.

The north and north-east sides are the weakest, the ground outside the *enceinte* being here level, and at this point the defences are strongest. The ward is about 156 feet long and 132 feet wide, and the whole place is very defensible.

[a] P. 407.

[b] *History of Lancashire*, iv. 669. *History of Richmondshire*, ii. 404.

About half-a-mile in a south-easterly direction, near the church, is a field called "Ellabarrow, a name it has probably obtained from a large tumulus or artificial

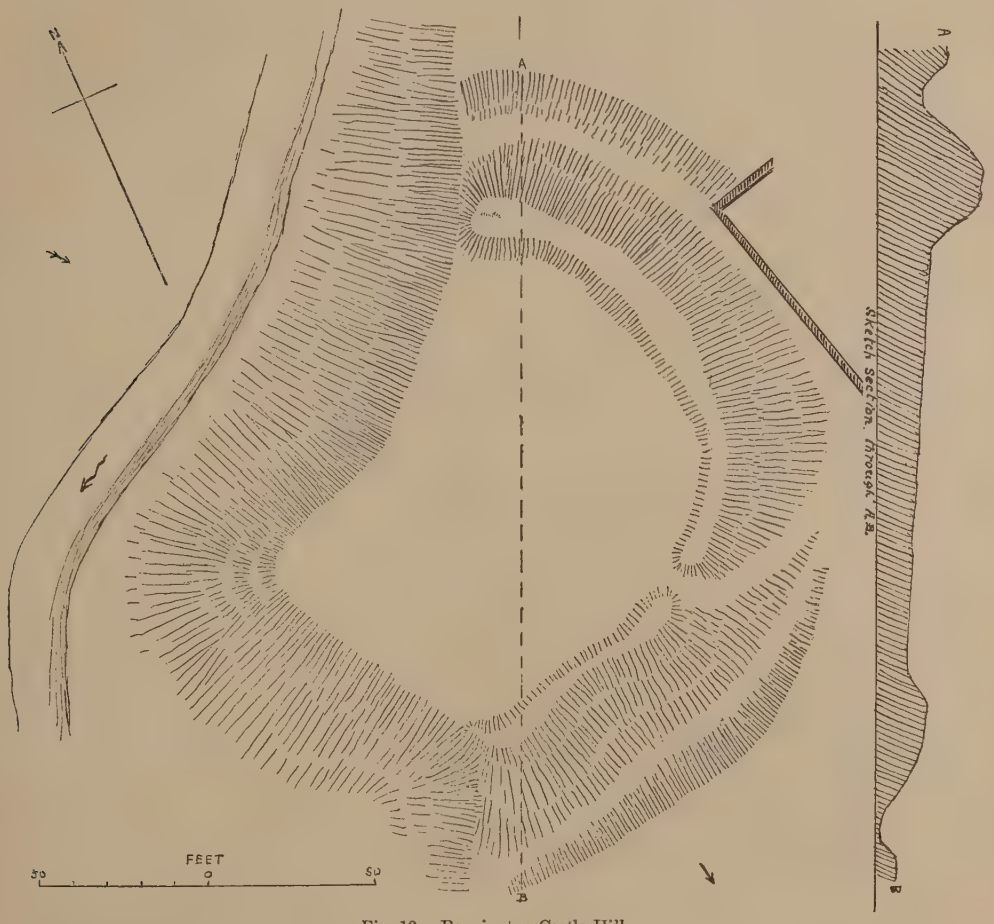



Fig. 13.—Pennington Castle Hill.

mount now covered with trees and known by the name of Coninger or Coninsher Wood, but which has once most probably been called Ella-barrow, and which has perhaps been formed with materials brought from a large excavation in the field which is now called by its name."[a]

This tumulus is in shape like an inverted vessel, and is 400 feet in circumference, and measures up the slope facing the stream to the summit 50 feet.

[a] W. F. 408.

The name Pennington, of course, signifies the ton or habitation of the Pennings or Paeningas.

The place is mentioned in *Doomsday*. The manor of Pennington has belonged from time immemorial to the ancient family of Pennington (now represented by Lord Muncaster), and not improbably it was their residence prior to the Conquest. It is said, however, to have been abandoned by them as a seat in the thirteenth century. The "capital messuage of Sir William Pennington" is, however, mentioned as late as 1318, in an agreement concerning a dispute between the abbot of Furness and the family.

It is probable, then, that the castle-hill is the fortified ton or habitation of the Pennings, and afterwards of the Penningtons, perhaps their descendants. If it be the site of the "capital messuage" of Sir William, this must have been a wooden house, as there has never been a stone castle upon the earthworks. Ellabarrow is probably a tumulus enclosing one or more of its Saxon lords. Conninger seems to be an abbreviation of Coning or Cyning Garth.[a]

The mound has never been examined.

With this the series ends. I cannot help hoping that similar sets of plans will some day be prepared for other parts of the country, and especially for those mountainous regions to which the Britons retreated before the Anglo-Saxon invaders. From such enquiries, and from such only, may we expect that some day a light will be thrown on the rude walled enclosures that crown the fells of Furness.

[a] Coning, Cunyg or Cyning enters largely into the nomenclature of these parts. There was a Conninggarth on the site of Caernarvon Castle, the ancient seat of the Le Flemings, near Beckerment, in Cumberland. Also Conninger Scar off Rampside. Coningsgarth, a farm near the Roman station of Old Carlisle. Conishead, Coniston, and perhaps Conybeds, the name of some ancient earthworks near Kendal.

XVII.—*On the Wall-Paintings in All Saints' Church, Friskney, Lincolnshire. Communicated by the Reverend* Henry John Cheales, *M.A., Vicar of Friskney, Rural Dean of Candleshoe, Local Secretary for Lincolnshire.*

Read June 11, 1891.

The discovery of additional subjects since I last had the honour to exhibit tracings of the Friskney wall-paintings has shown me that there was a general purpose of doctrinal teaching in the whole series, the recognition of which purpose gives a clue to the interpretation of each picture. The intention was, as I believe, to represent by a succession of subjects, progressively from west to east, the presence of Christ. First, in the flesh, "His earthly ministry"; second, in the "host"; the former in the series on the north, the latter on the south clerestory. The tracings before us are from the latter. They are a continuation (going from west to east) of the two subjects recorded in Vol. xlviii. of *Archaeologia*, viz., The Gathering of the Manna, and The Last Supper. I have numbered them in the order in which they stand in the church, occupying the three spandrels east of that which contains the picture of The Last Supper, *i.e.* on the clerestory wall above the three easternmost bays of the south arcade.

The last, No. 3, is of a different shape from all hitherto exhibited, filling as it does the long narrow space between the chancel wall and first bay of the arcade. It also differs from all (except the corresponding subject opposite on the north wall), in being painted quite up to the wall-plate of the roof. None, except these two on the north and south sides of the rood-loft, extend higher than the brackets which support the king-post principals of the roof. Unfortunately this painting on the south side has been narrowed still more by mutilation of the walls. A window at the east end of the clerestory, which had been evidently added to light the rood-loft, was filled in at the restoration of the church in 1879, and thus a part of the painting was destroyed before we knew of its existence.

No. I.

Here are two compartments divided equally by a vertical line down the centre (Plate XXIX.). In the sinister compartment a king, crowned and with robe reaching to the feet, is the prominent figure. He is standing, his right hand holding a sceptre, his left arm folded across the breast; from the left hand a long scroll descends to his feet. On his left a sword-bearer stands on the battlements of the entrance to a castle, the approach to it being by a bridge over a moat to the portcullis. The king's face is turned towards the castle.

The sword-bearer carries a drawn sword in the right hand, sloped over the right shoulder; with the left hand he motions towards the castle. Above, on the king's right, are a few lines which indicate, as far as I can judge from other instances in these paintings, the head of an angel or cherub, whose right hand is extended to touch the king's shoulder. There is a scroll from the head of the sword-bearer.

The dexter compartment represents the interior of a church or chapel, with the king crowned, and with arms crossed over his breast, kneeling before the altar; his sword-bearer, with drawn sword sloped over the left shoulder, stands at his right side. Another figure, very indistinct, stands behind the sword-bearer; each of them has one hand raised towards the altar.

A priest is standing before the altar and elevating the "host." There are indistinct lines above and to right and left of the round wafer, seeming to indicate the arms of a small floriated cross, or it may be part of a "glory" as emanating from the host. An attendant clerk stands on a lower step behind the priest. Over the altar are indications of a triptych, and upon it is a chalice. There are no scrolls in this compartment.

I interpret this painting as representing that the king, urged on the one hand to the possession of the castle, as indicating his worldly status, receives on the other hand divine monition to resign earthly sovereignty and seek the "kingdom which is not of this world"; the dexter compartment showing his acceptance of the monition and surrender of himself to the heavenly influence.

It seems not improbable that this may refer to the act of Ethelred, king of Mercia, who in 704 resigned his kingdom to become a monk in the abbey of Bardney, where he was afterwards made abbot.

The memory of this king was held in great veneration in Lincolnshire. The building itself of Bardney abbey is assigned to him; but it seems uncertain

FRISKNEY CHURCH, LINCOLNSHIRE.—WALL PAINTING OF THE KING DOING HOMAGE TO THE HOST.

whether he built or only rebuilt it. He certainly brought there the remains of St. Oswald's headless and handless trunk. It is also recorded[a] that "the memory of the king's great benefactions to the abbey is preserved to recent times, a barrow or tumulus near the site of the abbey, where tradition is that he was buried, being called 'King's Garth.'"

The connection of Friskney with Bardney[b] leads one to believe that this legend of Bardney's most famous abbot would be specially venerated here, and to conjecture that this painting bears reference to Ethelred's renunciation of his throne and devotion of himself to that Master whose presence he recognizes in the "host."

## No. II.

This, like the other, is in two compartments, similarly divided (Plate XXX.). In the sinister compartment is an altar; over the altar a window; upon it something which rather resembles part of a book than chalice or paten. Before the altar, standing with his back to it, is a bishop in mitre and mass vestments. In front of him is a kneeling figure; this seems, from the cast of the draperies in the few lines that have survived, to be that of a woman. This idea is strengthened by the more evident character of the dress in the similar figure in the other compartment. She kneels to receive something at the hands of the bishop, presumably the consecrated wafer.

In the dexter compartment the bishop again stands similarly vested before the altar, and here the posture of his hands is more manifest. They are extended towards the kneeling figure, the thumbs of each hand being in a position which shows the palms upward. The lines of the kneeling figure show part of the bodice and waist of a woman. Above the altar is a triptych, apparently enclosed by ridels; on the altar the "fair linen cloth," the fringe of which is seen at the north end; a chalice (with paten?) and part of the mass book. The frontal is plainly seen on the west side, and below it some lines which may indicate altar steps. (They can hardly be taken to represent a lower border to the frontal, as they are not parallel with the upper ledge of the altar.) There is a scroll upwards from the left hand of the bishop.

The interpretation of this subject, by comparison of the two compart-

[a] Oliver's *Monasteries of Lincolnshire* (Bardney).

[b] Oldfield's *History of Wainfleet* (Friskney).

ments, is pronounced by Fellows of this Society capable of forming a correct opinion, to have reference to the legend of Pope Gregory and the irreverent woman, as given in the "Golden Legend": "Matrona quædam singulis diebus dominicis beato Gregorio panes offerebat. Qui cum post missarum solemnia corpus domini offerret, et diceret 'corpus domini nostri ihesu christi custodiat te in vitam eternam' lasciva subrisit. Ille continuo dexteram ab ejus ore convertens partem illam dominici corporis super altare deposuit. Postmodum coram populo interrogavit quam ob causam ridere presumpserit. At illa 'quia panem quem propriis manibus feceram tu corpus dominicum appellabas.' Tunc Gregorius pro incredulitate mulieris se in oratione prostravit, et surgens particulam illam panis instar digiti carnem factam reperit, et sic matronam ad fidem reduxit. Oravit iterum et carnem illam in panem conversam vidit, et matrone sumendum tradidit."

The first act in this representation would therefore seem to be in the sinister compartment, where, on being offered the "host" the woman "wantonly laughed." The second, in the dexter compartment, giving the sequel; when, being appalled by the miraculous change of the wafer, she was "brought back to faith," and when the wafer which had been turned into a "finger of flesh" was finally administered to her.

## No. III.

I think we may interpret this painting in reference to the legend of the profanation of the sacred "host" by Jews, and the miraculous effusion of blood from the wafers when pierced. It is also in two compartments, the dividing line being not a vertical but horizontal one.

The upper part (Plate XXXI.) represents the interior of a building with a checkered pavement. In it are three male figures, two standing, one sitting. That on the right is in an attitude which well illustrates the words of a writer recording this incident as occurring at Brussels (Jean de St. Gery, Doyen de St. Gudule) "hostas pugionibus furiose perforebant."

There is great vigour and spite in the attitude of the man rising on tiptoe to give more force to his stroke, the right arm jerked up above his head to bring down the dagger upon the wafer, a portion of which is seen under his left hand. Leaning on the table with that hand he steadies himself for the stroke. His comrade, in less energetic posture, sits by the table, holding the point of his dagger in the "host," the weapon being held in the right hand, with elbow of right arm resting upon the table. There are no marks of blood discernible upon

FRISKNEY CHURCH, LINCOLNSHIRE.—WALL PAINTING OF THE IRREVERENT WOMAN.

the wafers or the table, though I think there are traces of such upon the floor. The marks are, however, so indistinct that I have not shown them in the tracing. The table stands supported by trestles upon a pavement of square tiles in geometrical pattern with alternate bars of red and blue. The position of the pavement shows that this compartment is distinct from that below.

In that the few lines which have survived[a] represent two figures reclining as in severe sickness, indicating, I presume, a divine visitation consequent on their profanity. A scroll (the only scroll in the painting) separates the two figures. That on the left has the head bent sideways on a pillow, and is propped up by a third person whose right arm is supporting it. The left arm is raised with the fingers of the hand extended upwards. A hood is drawn over the head of this attendant figure, the sex of which is not apparent.

It is interesting to note that the date of these paintings, early fifteenth century, coincides with the period when the fame of the miracle of the bleeding "hosts," 1370, at St. Gudule's, Brussels, would be great in the Church throughout Europe.

The legends referring to this act of sacrilege are numerous, and mainly of the fourteenth century. In Mr. Baring Gould's *Historic Events and Oddities*, seven instances are quoted.[b] The places connected with the legend are various: Paris, at least two instances; Dijon, the Ste. Chapelle; Chalons-sur-Marne, church of St. Alpin; Brandebourg; Dechendorf in Bavaria; and, most notably of all, Brussels. Full details of the theft and profanation of sixteen hosts from St. Catherine's are given with plates in a little book by Von Bergen.[c]

But though the legend was so widely spread and frequently recorded the pictorial representations referring to it are rare.

I have been unable, after much inquiry and search, to obtain knowledge of other instances except that of the oil painting in the Chapelle Expiatoire de Salazar and the painted windows in St. Gudule's at Brussels. I do not think that any example of the illustration has been found in England except this in Friskney church. Among the illuminated MSS. in the British Museum, I have been

[a] Owing to its fragmentary condition this half of the picture has been omitted from Plate XXXI.

[b] Baring Gould's *Historic Events and Oddities*, Second Series, 114, and Lacroix, *Le Moyen Age et la Renaissance*, vol. I. Art. Juifs, fo. vj. Le Juif de la rue des Billettes, au vitrail de l'Eglise Saint Alpin, à Châlons (Marne).

[c] Brussels, 1770, *L'Histoire des Hosties Miraculeuses.*

able to find only one instance. It is at the foot of a page in a Gospel Lectionary[a] in Latin, written by Sifer Was for Lord Lovel, who died in 1408. Two figures are represented as stabbing a host on a table before them, and the posture, the way their arms are held, curiously resembles that of the two Jews in this group.

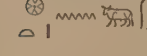
Taking these three pictures as concluding the series on the south wall illustrative of the presence of Christ in the "host," we see how that main teaching of the whole series is brought out more strongly and with deeper doctrinal significance by each picture as it approaches in position more nearly to the altar. These three, as I said before, continue the sequence. The first, on the spandrel next to the tower, is the Offering of Bread and Wine by Melchizedech to Abraham; next to that is the Gathering of the Manna; then the anti-type, the Last Supper; the fourth, the first of the pictures before us, shews the power of Christ's presence, acknowledged by the king's doing homage to the "host"; the fifth depicts the miracle wrought to compel reverence to the "host"; then the culminating proof of a corporeal presence in the bleeding of the "hosts," when stabbed, a witness and miraculous evidence of Christ's presence both to confound the enemy and confirm the faithful.

[a] Harl. MS. 7026, f. 13.

FRISKNEY CHURCH, LINCOLNSHIRE.—WALL PAINTING OF THE JEWS STABBING THE HOST.

XVIII.—*On a Coptic Grave-shirt in the possession of General Sir Francis Grenfell, G.C.B., G.C.M.G., etc.* *By* E. A. Wallis Budge, *Esq., Litt. D., F.S.A.*

Read November 26th, 1891.

That the Egypt of the Pharaohs was famous from the earliest times for the manufacture of linen is evident not only from the splendid specimens of linen bandages and sheets in which mummies are wrapped, but also from the testimony of ancient writers. Egyptian linen was, for the most part, made of flax, and a good idea of what an important matter the success of the flax crop was in Egypt may be gathered from the fact that the smiting of the flax (בְּשֻׁתָּה) when in bloom by the hail (mentioned in Exodus ix. 31), was considered to be as great a calamity as the smiting of the barley when in the ear. The finest and best linen was worn by the priests of Egypt in the form of shirts, the κιθῶνας λινέους of Herodotus, ii. 37, 81, a commoner and coarser sort was used for the final bandages and "sheet" of mummies, perhaps also for sleeping upon, compare the אֲטוּן מִצְרַיִם of Prov. vii. 16, and the coarsest sort of all for sails, awnings,[a] etc. Nearly all the flax woven in Egypt was grown in the Delta, and the best quality appears to have come from Pelusium; according to Strabo, Panopolis was famous in olden times for the manufacture of linen, and working in stones,[b] and it is easy to show that the art of weaving linen and of ornamenting garments with woven or worked designs did not pass away from that town until ten or eleven centuries after the birth of Christ. The modern representative of Panopolis is the town called Akhmîm by the Arabs, اخميم and Shimin ϣⲓⲙⲓⲛ or Chmim ϫⲙⲓⲙ by the Copts; it is situated on the east or right bank of the Nile, about 325 miles south of Cairo. The names which the old Egyptian town near here bore in hieroglyphics were *Ámsuti*, *Ápu*, *Het Ketu*, and  *Nut en ka pes*[c]; and it was famous as the seat of the worship of the

[a] Ezekiel xxvii. 7, שֵׁשׁ בְּרִקְמָה מִמִּצְרַיִם; lxx. Βύσσινον ἔχων ἱστίον; Deipnos. v., p. 206, ed. Casaubon.

[b] Πανῶν πόλις, λινουργῶν καὶ λιθουργῶν κατοικία παλαιά. Lib. xvii. § 41.

[c] Brugsch, *Dict. Géog.*, p. 1022.

ithyphallic god Ȧmsu, a form of Ȧmen-Rā, who was identified with Pan by the Greeks. In the early centuries of the Christian era it was one of the flourishing centres of the Coptic religion, and the site of large Coptic monasteries; it is frequently mentioned in Coptic writings, and many important events connected with the Coptic Church happened there. To this day the modern town contains a large number of Copts, and the cloth-making industry there is by no means unimportant.

The collections of linen garments in the various European museums were comparatively small and insignificant before 1882; bandages, sheets, and such like things existed in large numbers, but very few articles in linen which served to give an idea of the manner in which the Egyptians, Greeks, and Copts ornamented their garments were known. This might be accounted for in two ways; either that very few examples of garments worked with designs had, up to that period, been found; or that, if found, they had been used by the Arabs for purposes of clothing. There is nothing to be surprised at in this latter supposition, because the tenacity of good Egyptian mummy-cloth is so great that it must be cut with scissors or a knife, and cannot be torn; and we know that as far back as the time of 'Abd el-Laṭîf[a] (about A.D. 1200), the Arabs employed mummy-cloth for making garments.

About the year 1882 news was received in Europe that a large "find" of mummies had been made near Ṣaḳḳârah, and the first report attributed them to a fairly ancient period of Egyptian history;[b] the later investigations, however, showed that the grave dresses, and therefore also the bodies, for they were not mummies, belonged to the Graeco-Roman period, and it was possible to see the actual garments in which men and women had walked about in Egypt during the early centuries of the Christian era. Mr. Theodor Graf, the merchant, was successful in making a fine collection, which included choice specimens of all the various kinds of grave garments, in part or whole, and he afterwards gave it to the Museum in Vienna. The other European museums were not fortunate enough to obtain any large proportion of the good things which were found; nevertheless, the British Museum acquired some valuable fragments of worked garments.

A year or two after the discovery of Graeco-Roman and Romano-Coptic garments at Ṣaḳḳârah, a very large "find" of textile fabrics happened at Akhmîm, and the most cursory examination shewed at once that the discovery

[a] De Sacy's translation, p. 198.

[b] An account of this discovery is given by Karabacek in his paper, *Die Theodor Graf'schen Funde in Aegypten*, Wien, 1883, p. 24 ff.

at Ṣaḳḳârah was supplemented in a most remarkable manner, and that the enormous quantity of worked linen garments found at the latter place filled up gaps and increased our knowledge of the great art linen industry of ancient Egypt. By whom the discovery of this Romano-Coptic necropolis was first made is not known, but as soon as the natives of Egypt knew of its existence, they forsook their regular employment, and rushed to the spot and began to dig and ransack the graves, stripping the bodies of every stitch of clothing which they had upon them, and in their eagerness for plunder destroying a great deal more than they succeeded in carrying off. A hand was torn off for a bracelet, a finger for a ring, and a head for a necklace; where the good tough linen refused to yield it was hacked through by any tool which the irresponsible excavator happened to have handy, and any ornamental needlework or silk was stripped off from the garment on which it had been sewn without the least regard to the importance that complete garments would have had for science. It need hardly be said that the excavators belonged chiefly to the fellâhîn class, who had no means of disposing of their booty, and who then began a system of selling what they had found to each other, the price of the garment or fragment or object rising each time it changed hands, quite irrespective of its actual value. The middle-men and dealers supplied money to carry on clandestine excavations to be made chiefly by night, and as it henceforth became impossible to gain any exact idea of the "find" as a whole, or to make any scientific investigations in places where important collections of objects had been discovered together, the full value of the "find" to science was never obtained; and the number of whole garments which escaped mutilation was very few. Before I speak of that specimen which is the subject of these remarks a few facts in connection with the "find" at Akhmîm must be noted.

The graves of the people who lived at Akhmîm during the Romano-Coptic period are different in many respects from those of the same period found elsewhere; the bodies unmummified were buried there in graves about five feet deep, and were for the most part unprotected either by coffins or stone slabs, although here, as at Aswân, people of importance had a series of slabs laid over them to preserve their bodies from wild animals, and other disturbing causes. Here, as at Aswân, when the stones round about the grave had become the same colour as the ordinary ground, there was nothing to indicate the existence of a grave to the passer-by. The body is often found bound with linen bandages to a flat board, a custom which appears to have been introduced into Egypt under the Ptolemies, when the ordinary Egyptian coffin in the form of Osiris, and

the wooden sarcophagus in which it was placed, were superseded by a flat board about 7 feet 6 inches by 4 feet, upon which was placed a rectangular vaulted chest, having a thick, square wooden upright at each corner. The Graeco-Egyptian mummy had a painted shroud laid upon it before the large wooden chest was placed over it, and this custom survived at Akhmîm several centuries after Christ. Bodies found at Akhmîm owe their marvellous state of preservation neither to bitumen nor the ordinary spices, etc., used by the ancient Egyptians to embalm dead bodies, but to the dryness of the stratum of rocky, sandy earth in which they were laid; the salt crystals which are found adhering to the boards on which bodies were laid, and sparkling between the folds of the garment nearest the body, show that natron in some form was used to prevent decay of the body. The appearance of these Akhmîm bodies resembles that of those preserved entirely by natron, which are found stored in such numbers in the caves in the mountains of Thebes. In addition to the worked shirt, tunic, or "sheets," etc., with which the body is clothed, the head is bound round with a bandage or turban, and the feet have usually sandals, or shoes, or stockings upon them. The name and rank of the person were indicated not by lengthy inscriptions on the coffin or sarcophagus, as in the time of the ancient Egyptians, but by wooden *tesseræ* varying from 3 to 6 inches in breadth, and from $1\frac{1}{2}$ to $2\frac{1}{2}$ inches in width, upon which were usually written or cut the names of the deceased and of his father or mother in hieratic, demotic, and Greek; these were pierced at one end and suspended from the necks of the dead by a string. A considerable number of excellent imitations of these *tesseræ* have been made in Egypt during the last few years from the ancient sycamore body-boards found in the tombs; they are usually to be detected by the easy manner in which the ink rubs off, and also by its intense blackness. Ancient Egyptian mummies are found to have necklaces, finger-rings, and other ornaments upon them, and the custom of decorating the bodies of the dead was adopted and extended by the people of Akhmîm, and the forms of the various articles of ornament are peculiar to the time and place. The hair-pins and combs are usually made of wood and bone, but they are often made of bronze and rarely of iron. In a collection of Coptic crosses, ornaments, etc., from various places in Egypt, presented to the British Museum in 1886 by the late Rev. Greville J. Chester, is an interesting iron hair-pin with a rectangular hollow-work head upon which is the figure of a bird; other examples of the hair-pins have the unpointed ends ornamented with crosses. The combs have a row of teeth on each side, and the space on each side between these is ornamented with floral and other carvings. The earrings are made of gold,

silver, bronze, wood, and glass, and are ornamented with pendants usually made of various precious stones or metals, but sometimes they are formed of twisted wires, from the ends of which is suspended a single bead of pearl, carnelian, or glass. The neck-rings are usually made of bronze, and, except in the manner in which they fasten, are not much different from the neck-ring or torque from which the scarab was suspended by a gold chain on the mummy of Thothmes III. (B. M. No. 18,190); as it was a most important matter that the inscribed scarab should lie over the heart in a mummy this would seem to be a sufficient explanation of the origin of neck-rings in Egypt. The armlets are made of various substances, bronze, iron, and glass, the latter being of considerable variety and interest. Bronze and iron armlets are made of a thick wire or band of metal, and when open the ends terminate in crosses, and frequently little copper bells with wire clappers are suspended from them. An interesting class of objects from Coptic graves at Akhmîm and Thebes are sets of iron or bronze toilet implements suspended from wire rings; a set usually contains five—two pairs of tweezers, one pointed spatula, and two piercers. The crosses found on the bodies at Akhmîm are usually made of bronze, wood, ivory, bone, glass, and mother-of-pearl, and are of various forms; generally the four arms are of equal length. They are ornamented with annules, linear designs, circular bosses, etc., etc., and are suspended either from a ring soldered on to them or from holes drilled in one of the arms. Among the amulets found there must be mentioned the small pendent plaques made of bone or ivory upon which is carved in relief a figure of St. George, or, according to some, St. Michael, spearing the dragon. These plaques are rounded at the top, and were suspended by a projection made in the form of a cross. St. George is seated on a horse and holds a long spear, which he drives into the dragon. It was a favourite subject with the silk and linen workers of Panopolis, for it is often worked on garments in which Copts were buried.[a] In the designs on silk and linen St. George holds a cross in his left hand, and one end of the spear, which he drives into the dragon's mouth, terminates in a cross, and the dragon takes the form of a crocodile; the whole scene forms, as Herr Forrer rightly says, "eine bildliche Verherrlichung der Besiegung des Heidenthums durch das Christenthum."[b] An interesting representation of this scene is also found on an

[a] See Gerspach, *Tapisseries Coptes*, No. 76, and Forrer, *Römische und Byzantinische Seiden-Textilien*, Bl. iii., No. 2.

[b] I have made some remarks on the connection of St. George and the Dragon with Rā and Āpepi in the preface to my *Martyrdom of Saint George of Cappadocia*.

embossed metal disk preserved in the British Museum (No. 24,324); the disk was suspended by a hair string from the neck, and was presented by the Rev. Greville Chester, 1891. The tombs of Akhmîm also yield a number of small, flat mother-of-pearl birds, figures of which are also seen on the margins of Coptic manuscripts [a] as early as the sixth and seventh centuries.

The small objects described above we shall probably be correct in attributing to a period which begins with the end of the third and ends with the beginning or middle of the eighth century A.D. The use of glass arm-rings probably extended over a longer period, for many are known which belong to a period some hundreds of years subsequent to the conquest of Egypt by the Arabs. The worked garments, however, begin at a much earlier period; certain authorities [b] would date them from the fifth to the eighth century, but there is little doubt now that we must assign the earliest of them to the second or third century after Christ, and the latest of them to the eighth or ninth century.[c]

The fabrics from Akhmîm have been roughly divided into three classes, which belong to the Roman, Transition, and Byzantine periods respectively. The colours chiefly found in those of the first period are black, dark red, reddish brown, and almost every shade of colour between violet and dark blue; the colours of the transition period are not well defined, while in the Byzantine period bright blue, greens, and yellows are exceedingly common. The designs worked upon garments of the Roman period belong entirely to the classical times, and consist chiefly of contests with animals and mythological and fabulous beings, wrought with wonderful care and beauty. The borders are formed of plants, leaves, flowers, vases of fruit, and patterns in symmetrical line work, and a series of animals running; the medallions are of various shapes, but the most frequent forms met with are square and round, and the designs consist of beings half man, half animal, the labours of Hercules, Perseus and Andromeda, centaur playing a harp, gladiators fighting with beasts, men riding on horseback, mermaids blowing horns, animals running, etc., bordered with smaller medallions representing trees, doves, flowers, animals, geometrical patterns, etc., etc. Round medallions have often an elaborate cross

[a] See Hyvernat, *Album de Paléographie Copte*, pl. III.

[b] Dr. F. Bock and Essenwein quoted in Forrer, *op. cit.* p. 19.

[c] Die Textilien . . . . . der "Römischen Epoche" . . . . . tragen durchaus den Charakter des ersten 3 Jahrhunderte unserer Zeitrechnung. Forrer, *op. cit.* p. 19. "Les plus anciens et les plus nombreux tombeaux renfermant des tapisseries sont du II ou du III$^{e}$ siècle après Jésus-Christ; les plus récents paraissent être du VIII$^{e}$ ou du IX$^{e}$." Gerspach, *Les Tapisseries Coptes*, p. 2.

worked on them, and have a scalloped edge; medallions are also made in the shape of an eight-rayed star, and some are oval. The characteristics of the work of this period were never reproduced in later times.[a]

The designs of the textiles of the transition period may be recognised by lack of exactness, by a modification in the forms of men, animals, etc., and by defective arrangement as compared with those of the Roman period; the beginning of the transition period may, perhaps, be attributed to the end of the fourth or beginning of the fifth century A.D. During this period the use of a number of bright colours became common both in medallions and borders. M. Gerspach (Plates 75 ff.) has reproduced some very interesting and characteristic examples of the work of this time, the most important of which are a Parthian horseman in full flight, having his head turned behind him and shooting an arrow, and St. George in armour on horseback, surrounded with birds, animals, etc.; in the former case the medallion is oval, and in the latter the design is enclosed within an oval, on a square red background, at each corner of which is a cherub. At this period, too, the character of the subjects changes from heathen to Christian. We no longer find wild animals, mythical monsters, gladiators fighting with animals, and the acts of Greek and Roman gods represented, but figures of the Almighty and His saints and apostles, and figures of the Cross, the Lamb, the fish, the Dove, and the cock take their place. These designs are probably the result of the toleration of the Christian religion which followed the declaration of Theodosius I., A.D. 379, that Christianity should be the religion of his empire, when the persecution of the adherents to the form of the religion of ancient Egypt then in use began. By the end of the fourth century the Copts had become a very powerful body in Egypt, and very numerous; monochrome designs on their garments had almost entirely disappeared, and those in polychrome took their place.

A century later brings us to the period when the designs may be considered Byzantine, and one very important characteristic of the time is the white ground upon which they are worked in colours. The figures of men and beasts lack both spirit and delicacy of execution, all the classical beauty which stood out so strongly in the stuffs of the Roman period is lost, and the ornamental borders and patterns which in the first two periods formed such important parts of the whole design, are carelessly wrought and of little interest; it is only with diffi-

[a] "Le dessin est sommaire, net, sobre, bien combiné, harmonieux, d'une grande franchise plastique, dans le style qu'adoptera ultérieurement l'art héraldique; naturellement, dans la figure il est plus faible que dans l'ornement, car le tapissier, avec sa broche, ne trace pas aussi facilement que le céramiste avec son pinceau." Gerspach, p. 4.

culty that some subjects can be identified. Many of the animals are comparatively shapeless masses, and what the artist lacked in skill he made up in gaudiness of colour. At the end of the fifth century, or a little later, the designs on Akhmîm fabrics became practically Christian, and the Cross is met with in numberless forms; representations of God the Father, figures of saints wearing halos, scenes in the lives of the Evangelists and Martyrs, pictures of Christ and of events in His life, the peacock and the fish, and ☧, with Α on one side and Ω on the other, are the designs most commonly met with. Long before this time we know that it was customary to weave portraits of emperors and other distinguished men in linen,[a] and the transition to weaving portraits of the saints was at once easy and natural. At this period short inscriptions, in Coptic letters, giving usually the name of the person over whom they are placed, and even single letters, were often woven in textiles at Akhmîm.

The above preliminary remarks bring us to the object which has called them forth, viz., the splendid example of an Akhmîm sleeved garment exhibited here this evening by the kind permission of its possessor, Sir Francis Grenfell, G.C.B. (Plate XXXII.) From the neck to the feet it measures 4 feet 6 inches, from the end of one sleeve to the end of the other it measures 5 feet $10\frac{1}{2}$ inches, and the body is 2 feet 9 inches in width; the opening for the neck is 22 inches in circumference, and is worked round in chain-stitch with crimson linen thread. This garment was woven in one piece, which being folded exactly in the middle horizontally, that is in its smaller diameter, thus formed the back and front; the rough edges were turned down about the eighth of an inch, and were sewn together on each side up to the armpits, and along underneath the arms, thus forming the body and the sleeves. I believe that the opening for the neck was cut afterwards, and that the crimson chain-stitch which runs along each side, and continues down the front (or back) half an inch, and down the back (or front) $2\frac{1}{2}$ inches, to prevent the opening tearing at the ends, was sewn on to hide the ragged edges. The most interesting fact connected with this garment is the completeness of the monochrome ornamental designs which are woven on separate pieces and sewn on to it, and their wonderful state of preservation. On one shoulder is a rectangular medallion, 7 inches square, formed by the bust of a man, enclosed in a square border which is in turn enclosed by a border somewhat similar to that which surrounds the lion reproduced by Gerspach in his *Tapisseries Coptes*, Plate 5; on the other the

[a] Forrer (*Textilfunde*, p. 24) quotes the instance of Gratian (died 383) who sent to the Consul Ausonius a tunic with the portrait of Constantine the Great worked upon it.

COPTIC GRAVE-SHIRT.

*In the possession of General Sir F. Grenfell, G.C.B., G.C.M.G., &c.*

*(about one-sixth linear).*

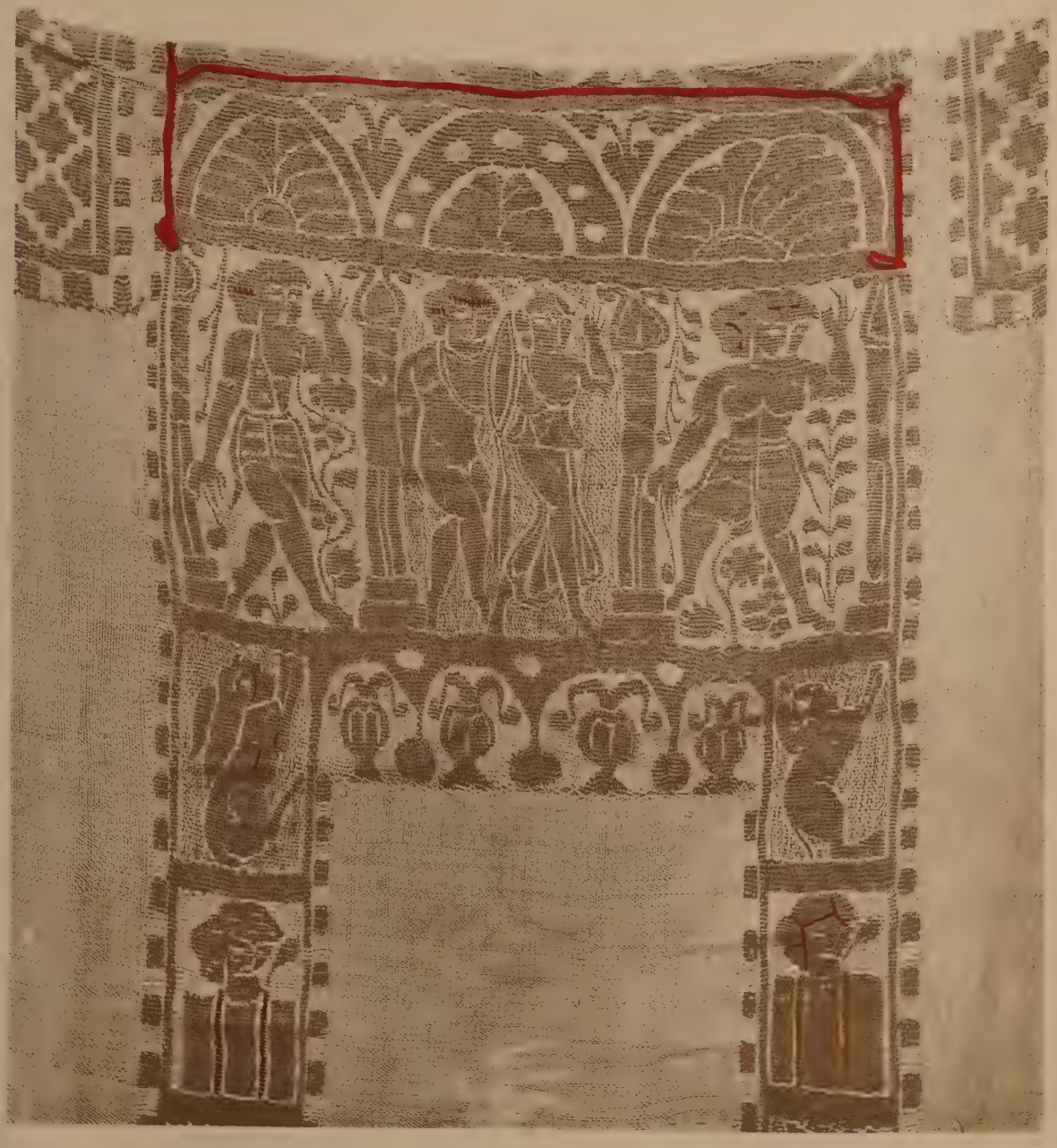
design represents a man running, and holding some object in his left hand. These and the other designs on the garment were woven into the linen, and the pieces were carefully sewn into spaces left for them. On the breast of the garment is a rectangular design $11\frac{1}{2}$ inches by $8\frac{1}{2}$ inches; the upper part or border consists of three semi-circular palm-leaf ornaments, of unequal diameters, the middle one having a band with white spots above it. The lower part contains three divisions formed by pillars; in the first is an upright man walking, the space on each side of him being decorated with vine leaves and flowers, in the second are a man holding an oval shield, and a woman with flowing garments, and in the third is a woman full-faced and upright, having flowers and branches of trees on each side (Plate XXXIII.). The hair of three of the figures is ornamented with threads of reddish-yellow sewn into the linen; beneath these divisions is a row of ornamental vases similar to those figured in Gerspach, *Tapisseries Coptes*, Plate 29. On the back of the garment is an almost similar design, but the position of the human figures is somewhat varied in each of the three divisions. Down the back and front are two bands of ornamental designs consisting of a series of rectangular medallions in which are woven lions, busts of men, and hares and other animals arranged alternately; these medallions measure $3\frac{3}{8}$ by $2\frac{3}{4}$ inches, $3\frac{1}{2}$ by $2\frac{5}{8}$, and $3\frac{1}{8}$ by $2\frac{5}{8}$ respectively. Down each bust are two stripes ornamented with yellow and reddish yellow linen thread. It is probable that the Akhmîm weavers adopted the hare as an ornament from the gaudily painted shrouds of the Ptolemaic period; in ancient Egyptian times the animal was considered to be emblematic of the god Osiris, and figures of it were worn by the living Egyptians, and were placed upon their bodies, among their bandages, when dead. That the Christian population of Akhmîm saw in it the symbol of the resurrection, just as the Egyptians saw in it the emblem of the new birth of the sun, is very probable. Around each sleeve of the garment, at the wrist, is a band formed of two rectangular medallions, in one of which is woven a hare, and in the other a lion. The number of the linen threads varies from about fifty-three to fifty-eight to the inch. About eight inches from the bottom, and about three inches from each side, on the front and back of the garment, is a rectangular medallion in which are woven figures of animals; three have a hare, and one has a bull (?) A careful comparison of the designs upon this garment with those reproduced by Forrer and Gerspach, and those upon textiles in the British Museum, leads me to the belief that the garment itself was made at the end of the sixth or beginning of the seventh century after Christ; it is a very interesting and perfect specimen of Akhmîm linen work, and it is a remarkable fact that it has escaped mutilation at the hands of the men who found it. From the days of Joseph the Patriarch, whose father Jacob made him a

כְּתֹנֶת פַּסִּים, *i.e.*, a tunic reaching down to the feet, and having sleeves reaching to the wrists, and from the days of Tamar, the sister of Absalom, who also wore such a garment, "for with such robes were the king's daughters that were virgins apparelled," down to the present time the sleeved garment has always been a favourite with the well-to-do oriental, and has always been considered the badge of dignity and position. It is unfortunate that the ends of the sleeves of the garment described above are frayed out, and it is a fact difficult to account for.

Side by side with the work in coloured linen there existed at Akhmîm a large manufacture of silk-weaving, many beautiful examples of which have come down to our day. Silken garments, etc., from Akhmîm belong to three periods, viz., Roman, Late-Roman and Early-Byzantine, and Byzantine; some fine examples of each period are reproduced in colours by Forrer in his *Römische und Byzantinische Seiden-Textilien*, Strassburg, 1891. It is very doubtful if the Jews were acquainted with silk in the days in which the books of the Old Testament were written, although שֵׁשׁ is rendered in A.V. on the margin in Gen. xli. 42, and in Proverbs xxxi. 22, by "silk," as is also the word שֵׁשׁ in Ezek. xvi. 10, 13; the Greek and other translations of the latter word do not agree in meaning, and are in any case unsatisfactory. Of the great antiquity of the use of silk in China there is no doubt whatever, and it is said that the mulberry tree was cultivated in China expressly for feeding silkworms as early as B.C. 2200.[a] The exact period when it first appeared in the western countries of the Roman empire is unknown, but it is certain that silk was well known and used, among other things, for making flags by the Parthians in the first century before Christ, and that its use should rapidly extend to luxurious Rome was only a matter of course. Once introduced into Europe the members of Imperial families, noblemen, courtesans, and others wore it in the form of tunics, shawls, veils, and other articles of dress, and the curtains of the chariots of the wealthy were made of this valuable material. The Phoenician women of Tyre and Sidon were very skilful in weaving threads of gold into the silk fabric and in embroidering it in such a way that when worn on the persons of women it had all the appearance of lace, and allowed the white skin to be easily seen. From Phoenicia or Rome the introduction of silk into Egypt followed naturally, and by the end of the second century after Christ its use must have become comparatively widespread in that country, although it must have formed a very expensive article of dress. In the third century a pound of gold was the price of a pound of silk, and Aurelian denied his wife a silk shawl because he did not wish to encourage the use of such an expensive luxury.[b] In

[a] *Résumé des principaux Traités Chinois sur la Culture des Mûriers et l'Éducation des Vers à Soie*, traduit par Stanislas Julien, Paris, 1837, pp. 67, 68.

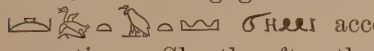
[b] "Et cum ab eo uxor sua peteret, ut unico pallio blatteo serico uteretur, ille respondit, Absit, ut auro fila pensentur." Vopiscus, *Vit. Aur.*, cap. 45.



FRONT PANEL ON A COPTIC GRAVE-SHIRT.

*In the possession of General Sir F. Grenfell, G.C.B., G.C.M.G., &c.*

(*about ⅛ linear*).

the following century the Christian writers Gregorius Nazianzenus, Basil, Ambrose, Jerome, and Chrysostom often refer to the use of silk, and although some of them rebuke their followers for the love of silk garments, and endeavour to discourage the use of it among them, Basil employs the description of the change of the chrysalis to typify the doctrine of the resurrection from the dead, and exhorts the women who wind off the thread from the silkworm to remember the changes which take place in the creature, and to gain therefrom a correct knowledge of the resurrection.[a] From the use of silk garments as the dress of the living to forming an ornament of the dead was an easy transition, and it is probable that by the end of the fourth century of our era, silk grave garments were common in Egypt. An interesting account of a mummy dressed in pure silk has come down to us incidentally in the Coptic life of Pisentios, bishop of Coptos in the seventh century. It appears that, owing to the troubles caused by the coming of the Persians into Egypt, this bishop set his affairs in order, and having given all his goods to the poor, he set out for the mountain of  accompanied by his disciple John, where they lived for some time. Shortly after they again set out to seek a resting place, and having walked about three miles in the mountains, they arrived at an open door of the large outer chamber of an Egyptian tomb. They went inside and found a chamber hewn out of the solid rock, the roof of which was supported by six pillars; this chamber was about seventy feet square, and heaped in it were a number of mummified bodies which emitted odours. The names of the people buried there were written on a small parchment roll, and it seems quite clear that we have here an instance of the use of an Egyptian tomb of the ancient or middle empire which had been turned into a common burial place during Graeco-Roman times, and there is little doubt that a considerable amount of the damage done to ancient tombs which were open during this period was caused by the crowds of fanatical recluses who lived in them, and who saw in the pictures of the gods which ornamented the walls the representations of the devils and fiends of hell. To make room for themselves Pisentios and his disciple John began to pile up the coffins one upon the other, and John states that the [outer] coffins were very large, and that those in which the bodies were laid were very much decorated.[b]

[a] For a valuable discussion on the origin and use of silk in Europe, the original home of the silkworm, etc., etc., see Yates, *Textrinum Antiquorum*, p. 229. ff., and Hoffmann, *Observationes circa Bombyces, Sericum, et Moros*, etc., Tübingen, 1757, 4to.

[b] The Coptic text may be understood to mean that the place or chamber was a very large one, and that the place or part of it where the bodies had been laid was much decorated; whether the bodies were in coffins or not interferes in no way with the certainty of the statement that one mummy was dressed in pure silk.

The first mummy which they moved had been lying near the door, and we are told that the fingers of the hands and the toes of the feet had been embalmed separately; these details are of great value, for they indicate that the mummy belonged to the Roman period, and when the writer adds the statement that the grave garments of this mummy were made of the "pure silk of kings," ϩⲁⲡ ϩⲟⲗⲟⲥⲏⲣⲓⲕⲟⲛ[a] ⲛⲉ ⲛ̀ⲧⲉ ⲡⲓⲟ̈ⲩⲣⲱⲟ̈ⲩ, we may gather from it that the writer is describing a mummy of the third or fourth century after Christ. If we are right in supposing that the mummies were laid in coffins,[b] the allusion is probably made to the massive and shapeless coffins which became common after the knowledge of the worship of Osiris had practically disappeared from Egypt, and the art of mummifying was in its last stages of decay.

In the collection of Sir John Evans, K.C.B., is a very interesting and typical selection of specimens of a large number of the various styles of Akhmîm linen work, which are exhibited on the table before us. The monochrome designs, geometrical patterns, rectangular and circular medallions of the earliest and latest periods, fringe work, coarse patterns in wool sewn on a linen ground, specimens of silk and damask work, and a considerable number of good examples of early and late borderings, form an instructive apparatus for the study of Romano-Egyptian, Romano-Coptic, and Byzantine textiles.

These observations may be brought to a close by the mention of a very fine specimen of silk work from Akhmîm which was presented to the British Museum by the Rev. W. Macgregor in 1886. A piece of fine yellow silk was laid over a linen garment, and upon this was sewn a rectangular crimson silk medallion upon which are woven two men on horseback facing each other, the faces of both men and horses being in yellow silk, the men's garments and the bodies of the horses and their trappings being in green and red; each man holds in his right hand a long spear with a triangular head which he is driving into the body of a dog (?) with a blue head turned behind him, yellow body, and green legs. Below them are dogs, woven in green silk, with their heads also turned behind them. In the field above the horses' heads is a flowering plant. All these figures are enclosed within a circular border in which red and green flowers are woven on a white ground, and the four corners are ornamented with designs in green upon a crimson ground. This piece of work belongs to the Byzantine period, and an example of a somewhat similar design woven upon linen is given by Forrer in *Die Graeber und Textilfunde*, Bl. xiii. No. 6.

[a] *i.e.*, ὁλοσηρικός.

[b] For the Coptic text and a French translation of it see Amélineau, *Étude sur le Christianisme en Égypte au Septième Siècle*, Paris, 1887, pp. 142-146.

XIX.—*The Crossbow of Ulrich V. Count of Wurtemburg*, 1460, *with remarks on its construction. By the* Baron de Cosson, *F.S.A.*

Read December 3, 1891, and March 3, 1892.[a]

The crossbow which forms the subject of this paper may be, I venture to think, of interest to the Fellows of the Society of Antiquaries, as it is a weapon of somewhat uncommon construction, of good artistic decoration, and more especially because the date which is inscribed on it and the escutcheons of arms which it bears, enable me to assign its ownership very definitely to a historical personage.

I will not trouble you with general remarks on the history of the crossbow, but I think there is reason to suppose that the use of this weapon in medieval Europe dates from the epoch of the first crusade, when it was introduced from the East.

I have a list of some seventy-five makers of crossbows, and it is significant that the earliest name I possess is that of Peter the Saracen, who in 1205 was maker of crossbows to King John.[b]

At the second Lateran Council in 1139 the use of the crossbow was prohibited amongst Christians as a weapon only fit for infidels, although its use was allowed against unbelievers, and this decision was confirmed by a decree of Innocent III. (1198-1216).

But these decrees did not prevent the gradual introduction of the crossbow into European warfare, any more than similar fulminations could at a later date stay the use of firearms, which we now know also to have been of Saracenic origin.

[a] This paper has been somewhat amended and extended since it was read, so as to embody the results of further investigations into its subject. When read it was still generally believed that bows of this type were made of horn.

[b] Close Rolls of King John; Bentley, *Excerpta Historica*, 395.

The Eastern origin of the medieval crossbow is also confirmed in a remarkable manner by the analogy which exists between the construction of the bow exhibited and the oriental composite bows dissected by Mr. Henry Balfour of the Oxford University Museum, and described and illustrated by him in his paper "On the structure and affinities of the composite bow," in the Journal of the Anthropological Institute.[a]

That the Saracens excelled in the construction of the crossbow even as late as the fifteenth century is shown by a letter addressed by King René of Anjou to Monsieur de Plesseys, accompanying the gift of a crossbow, which the king said had been made by some Saracens of Barcelona who refused to teach the art to Christians, and which was of strange form and much smaller than any he possessed and which he much esteemed, as he had never known a better.[b]

Notwithstanding the papal edicts, it is proved that as early as 1181, the Genoese were arming troops with the crossbow,[c] troops who were the forefathers of the luckless crossbowmen of Crecy. It must here be remembered that the Genoese had taken part in the first Crusade, and had therefore had occasion to appreciate the value of the weapon.

Richard the First of England is also reported to have armed some portion of his troops with the crossbow.

It was in 1205 that the constable of Northampton received orders to retain Peter the Saracen, the maker of crossbows, and another with him, for the king's service, and allow him nine pence a day. Another interesting entry with regard to English crossbows occurs in the Exchequer Rolls of Scotland.

In 1302 William Conrad, bowyer of the Tower of London, supplied "2 lbs. of wiseblase, 4 lbs. of glue, 4 lbs. of sinues of sea dogs," and other necessaries for balistae and bows to the Prince of Wales, who was then engaged in an expedition against Scotland.

This brings me back to the weapon now before you. The bow itself is of the kind which has hitherto been described by collectors either as a horn bow or a wooden bow. Its real construction has been thoroughly investigated by my

[a] November, 1889.

[b] *Œuvres complètes du Roi René d'Anjou*, par M. le Comte de Quatrebarbes, tome i. p. 110.

[c] *Monum. Hist. Patriæ*, t. ii. col. 21. Vandenpeereboom (*Gildes, corps et metiers, serments, etc.* Patria Belgica, 1874) says, L'arbalète était deja connue en Belgique à la fin du 11e siècle," and Magné de Marolles (*La chasse au fusil*) says, "Elle fit sou apparition en France sous le regne de Louis le Gros;" but I have not seen these works which are cited in Delaunay's *Etude sur les anciennes compagnies d'archers, d'arbalétriers et d'arquebusiers*, and do not know what proofs the authors may have for their statements.

friend Mr. John Clements of Liverpool, and will be explained in the Appendix to this paper. For the present it will suffice to say that it is composed of a core consisting of whalebone and yew, bound round with a thick sheath of tendon, and having pieces of horn let into its extremities to take the strain of the cord.

Numerous documents of the fourteenth and fifteenth centuries mention horn crossbows and crossbows of yew. The latter we can understand, but I strongly suspect that all the entries which speak of horn crossbows refer to composite bows similar to the example before you. Horn alone would neither have the size nor the flexibility and toughness needed in a bow. There are two very interesting documents in Paris describing the materials supplied to one Robert l'Artilleur for the construction of crossbows for the castle of Rouen.

The first, which is in the National Library and is dated 1358, reads thus:

Vechi les estoffles qui faillent à Robert l'Artilleeur pour faire vint-cinq arbalestres pour le chastel de Rouen, à rendre au terme de Pasques l'an mil CCCL et neuf, lesquelles estofles furent achatées au mois d'Octobre l'an mil CCCL et huit, que florins d'or à l'escu de Johan valloient vint soulz tournois la pièce.

Premierement:

Pour xxv batons d'if, v sous la piece, vallant vi livres v sous tournois.
Item, pour xxv estaples, xxv sous.
Item, pour xxv nois d'arbalestres ii sous la piece, vallant l sous.
Item, pour xxv éstriefs, l sous.
Item, pour xxv clefs, l sous.
Item, pour xii livres de fil de chanvre, xxx sous.
Item, pour une livre de chire, vj sous.
Item, pour demie livre de pois raisiné, x deniers.
Item, pour iiii livres de sieu, v sous.
Item, pour carbon de bosc, x sous.
Item, pour iiii livres de colle, xxiiii sous.
Item, pour iiii livres de ners de beuf carpis, xl sous.
Item, pour une livre de vernis, viii sous.
Item, pour xii cornes de bouc, xii sous vi deniers.
Somme tout, xxi livres xvi sous iiii deniers, achetés et pris au pris du florin d'or à l'escu pour xx sous tournois la piece, comme dessus est dit.

En tesmoing de ce, je devant dit Robert l'Artilleeur en ay seellé ceste escroe de mon seel.[a]

Now, in this document we find most of the materials that would be needed for the construction of a bow like the one exhibited. Taking them in the order in which they come they are: 25 pieces of yew, 25 staples, 25 crossbow nuts,

[a] *Bibliothèque Nationale, département des manuscrits, quittances*, t. xi., No. 804, transcribed by Siméon Luce, *Histoire de Bertrand du Guesclin*, Paris, 1876.

25 stirrups, 25 keys (that is triggers), 12 lbs. of hempen string, 1 lb. of wax, ½ lb. of resinous pitch, 4 lbs. of tallow, some charcoal, 4 lbs. of glue, 4 lbs. of ox sinew shredded out like lint, 1 lb. of varnish, and 12 rams' horns. The second document shows that three years later twenty-five more crossbows were ordered from the same Robert l'Artilleur. It is preserved in the Archives Nationales (*Monuments Historiques*, K. 48, No. 12), where I transcribed it. The materials are the same, but the prices had slightly changed:

Vechi les estoffles qui fallent à Robert l'Artilleeur pour faire xxv arbalestres pour le chastel de Rouen a rendre au tm̃e de la pasques CCCLXI. Pm̃em̃t:

Pour xxv bastons d'if, iiii éscus et demy.
Pour xxv estaples, i éscu.
Pour xxv nois, éscu et demy.
Pour xxv cles, ii éscus.
Pour xxv éstries, ii éscus.
Pour xii ł de fil de chanvre, éscu et demy.
Pour une livre de chire, i quart d'éscu.
Pour demie livre de pois, xviii d.
Pour iiii ł de sieu, viii s.
Pour carbon de bosc, i quart d'éscu.
Pour iiii ł de colle, i éscu.
Pour iiii ł de nerfs de beuf carpis, iii éscus.
Pour une livre de vernis, demy éscu
Pour xii cornes de bouc, demy éscu.
Some xviii éscus, ix s. vi d.
En tesm̃ de ce, je artilleeur dess̃ dit ay seellé ceste escroe de mon seel.

When we come to examine the construction of the bow now before you, we shall find that the materials are the same, with the exception that Robert l'Artilleur probably used horn where whalebone is found in the existing example.

A considerable number of crossbows of this composite construction are now known to exist, but they can all be traced to the north of Europe, and principally North Germany, and Scandinavia. I do not know of a single example in the national armouries of France, Italy, or Spain.

Mr. Henry Balfour informs me[a] there are: one in the Royal Armoury at Stockholm, one or two in the Northern Museum in the same place, one in the Northern Museum at Copenhagen, ten in the Arsenal at Berlin, and four in the Provincial Museum in the same city. There were also four in the Christian

[a] Letter of the 6th September, 1892

Hammer Museum at Stockholm, which was dispersed at Cologne in May 1892. And there is at least one in the Arsenal at Zurich.

Before this I was only acquainted with the following examples: a very fine and large one in the superb collection at Vienna from Ambras, which is decorated with the arms of the Styrian family of Baumkircher, and is attributed to the knight Andreas Baumkircher, who was beheaded in 1471,[a] and one from the Arsenal, described as having a bow of horn.[b] Another of similar form engraved in Skelton's *Engraved Illustrations of the Meyrick Collection*,[c] and there described as having a bow of wood. A fourth in the collection of Mr. W. H. Riggs, in Paris, engraved in Gay's *Glossaire Archéologique*,[d] and also said to be of wood; but Mr. Riggs himself, who has now seen my bow, says that his weapon is undoubtedly of the same construction. A fifth in the Tower of London, to which Lord Dillon has called my attention. Also the crossbow now under consideration, and lastly a plainer one laid on the table for comparison. It is by the careful dissection of this last example that its present owner, Mr. Clements, has made clear the true construction of these curious pieces. In confirmation of the view that all these bows are of similar make, I may mention that the Baumkircher bow was described by Böheim in the catalogue of 1889 as being of *wood*, whilst in his later work, *Waffenkunde*, he distinctly says it is of horn covered with parchment.

The true nature of this covering will be explained later, but it has sometimes been described as snake skin, as in the Christian Hammer Catalogue and in the example owned by Mr. Riggs, and sometimes as parchment; the dotted decoration on it having led to the first of these misconceptions.

We have therefore a type of medieval crossbow the true construction of which has never been described, and my strong impression is that in these northern weapons of the fifteenth century we have a survival of the earliest form of crossbow introduced into medieval Europe, those with a steel bow being of much later invention.

There is a somewhat archaic look about them, and a marked simplicity in their mechanism, which seems to point to this. It is well known how very conservative of old forms the Germans and Scandinavians have always been, and how at a later date many a German huntsman would persist in the use of the wheel-lock arquebus long after the flint-lock had taken its place in southern

[a] Engraved in Böheim, *Handbuch der Waffenkunde* (Leipzig, 1890), p. 407, fig. 484.

[b] *Die Waffensammlung des Österreichen Kaiserhauses*, by Guirin Leitner (Vienna, 1866-70), plate xxv, fig. 3

[c] Plate xcv. No. 2.

[d] Page 50.

Europe. There are wheel-lock rifles of German make in existence which date as late as the early part of the last century.

The plainer bow which I exhibit cannot, I think, be very different from the weapons made by Peter the Saracen in 1205, and it bears a strong resemblance to the crossbows represented on the Chertsey tiles and other archæological documents of the thirteenth century.

The bow itself is thick and massive, and it has a covering of a thin substance, decorated with yellow dots on a dark ground. Not much of this covering remains on the finer bow, but on the second there are portions in good preservation. This covering, whilst it decorated the bow, protected it from the action of damp. As in all early examples, the bow is lashed to the stock with strong cord. The shock of discharge was thus softened. Had the bow passed through the stock the jerk on discharge would have been apt to tear away the front part of the wood. The stock in both bows is of a light, close-grained wood, apparently beech, and where a harder substance is needed, as round the nut and the pins for the trigger and winder, etc., black-horn, bone, or stag-horn are inlaid in the wood, and the bold curves of these pieces add to the decoration of the weapon. The upper surface, on which the bolt lay, is in both cases of bone or stag-horn.

The plainer bow preserves its nut and stirrup, but both are wanting in the finer one. The long trigger, or "clef" as it was called in French, has a bold curve downwards, and in the finer bow the iron of which it is made is coated with brass on its under side. This combined use of iron and brass was very usual in German fifteenth-century armour and weapons of the richer sort. The bow itself is of immense stiffness, and the position of the transverse pin, about six inches behind the nut, proves that it was bent with the aid of a rack and pinion winder.

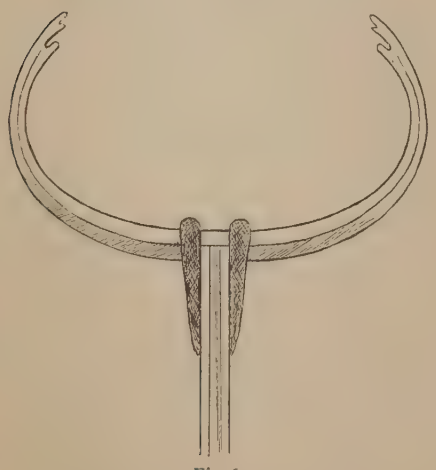


Fig. 1.
Sketch of Crossbow with strongly reflexed arms.

In the more decorated example, the bow itself curves slightly towards the stock, but in the plainer one the arms of the bow have a reflex curvature forwards, reminding one of the oriental strongly-reflexed composite bows. Mr. Balfour found in some few of the examples, which he kindly examined for me, a very extreme curvature, as in fig. 1, copied from his rough sketch. The

oriental bows before being strung had to be steeped for a considerable time in water to render them flexible, and it is probable that the extreme unyieldingness of the European examples at the present time is due to their complete dryness.

Such are the general constructive features of this class of crossbow, but one of the examples now before you is rendered additionally interesting by the presence of inlaid plaques of ivory finely sculptured in the style of the middle of the fifteenth century. There is also a pretty incised pattern on portions of the stock, filled with black mastic, in which Mr. C. H. Read, of the British Museum, suspects an Italian influence. This is quite possible. On the under side of the stock near the bow is an ivory plaque carved with a St. Michael standing in a niche of Gothic tracery, and close to the trigger another with a scroll in a figure of eight form inscribed with Hebrew characters. The united learning of Dr. Ginsburg and Mr. E. A. Wallis Budge has been brought to bear on this inscription, but without success so far as its interpretation is concerned,[a] and their conclusion is that the characters were copied by a sculptor who did not understand the Hebrew language. I believe that similar inscriptions, only destined to impress the ignorant with the vastness of the artist's learning, exist on some medals of the renaissance.

The sacred monogram I.H.S. is engraved on the ivory near the nut. On the dexter side of the stock behind the winder pin is a plaque bearing the arms of Wurtemburg with helm and crest, and beneath it a zigzag scroll inscribed in Gothic characters:

Gloria in excelsis deo Et in terra pax hominibus bone voluntatis Laudamus te Benedicimus te.

1860+ (1460).

Below is the figure of a man raising his hat.

On the sinister side are the arms of Savoy, also with helm and crest, and on an interwoven scroll a short hymn to the Virgin:

O Maria graciosa Dei mr generosa Diga laude gloriosa sis pro nobis speciosa. MCCCCLX

and beneath is a figure similar to the one on the other side.

When I obtained this piece in Paris last year, the owner informed me, and I have no reason to doubt his story, that the bow had been brought to Paris by Count Pourtalés Gorgier, who had found it with a few other weapons in the roof of his castle of Gorgier on the lake of Neuchâtel.

The other weapons had been sold, and the crossbow had for several years hung unnoticed on the wall where I found it. I at once recognised the arms of Wur-

[a] Dr. Ginsburg reads the characters "*Hab gasath zarab harab thérzé.*"

temburg and the date, but I felt uncertain about the second escutcheon, as the plain cross had been borne by many families besides that of Savoy. My delight was therefore great when I discovered that precisely in 1460, the families of Wurtemburg and Savoy were united in the persons of Ulrich V. Count of Wurtemburg, surnamed the Well-beloved, and his third wife Margaret of Savoy.

In 1419 Ulrich V. and his brother Louis I. succeeded Eberhard IV. under the regency of their mother, they being respectively nine and ten years of age. In 1442 they divided their states, Louis taking the upper part of Wurtemburg and the county of Montbéliard, and the remainder falling to Ulrich, who chose the castle of Stuttgart as his residence. His popularity with his subjects earned him the surname of the Well-beloved; but his warlike disposition involved him in numerous unsuccessful wars.

In 1462 he was signally defeated at Seckenheim on the Neckar, by Frederick Elector Palatine of the Rhine, who there gained the surname of the Victorious, and whose suit of armour, made by Missaglia of Milan, now at Vienna, is probably the earliest complete suit of armour in existence. After a year's imprisonment in the castle of Heidelberg, Ulrich was ransomed for 100,000 florins, and in 1482 he died. As has been said, his third wife was Margaret, daughter of Amadeus VIII., first Duke of Savoy, and widow of Louis IV., Elector Palatine.

I venture to think the conjunction of the escutcheons of husband and wife on this crossbow clearly proves it to have been the personal property of Ulrich the Well-beloved, and its original ownership being thus established, the question arises how it found its way to the castle of Gorgier on the lake of Neuchâtel; and a hypothesis here presents itself to my mind, which I will submit to your consideration.

Gorgier is only a few miles from Grandson, where Charles the Bold was so signally defeated in 1476. It is known that immense booty was taken on that occasion by the Swiss, and distributed through the different arsenals of their country. At that epoch the courts of Wurtemburg and Burgundy were in close and constant intercourse. The son of Ulrich the Well-beloved, who succeeded him as Eberhard V., passed his youth at the court of Charles the Bold.

The bow was not made for him, for Margaret of Savoy was not his mother; he being the son of the second wife, Elizabeth of Bavaria. When it was made he was thirteen years old; but had the bow been given to him later by his father, it is easy to see how it might have passed into the Burgundian camp.

I have not yet been able to find whether Eberhard was still with Charles the Bold at the time of the battle of Grandson; but if he was, the track of the bow would be clearly made out.

CROSSBOW OF ULRICH V., COUNT OF WURTEMBURG, 1460.

(*The front and sides views, ¼ linear; the details from the back full-size*)

## APPENDIX.

When three months ago I read to this Society a paper on the Crossbow of Ulrich V. Count of Wurtemburg, I treated more particularly of the historical aspect of the subject, but it will be remembered that in the very interesting discussion which followed Lord Dillon gave us a sketch of the results of an examination which he had made of the construction of crossbows in general and the method of using them. Some questions were also raised with respect to the special construction of the two bows then exhibited, but as our knowledge was at that time derived from the external appearance of the bows only, their true construction remained in doubt.

Since then, however, through the enterprise of my excellent friend Mr. John Clements, the owner of the plainer of the two bows which I exhibited, these questions have been thoroughly investigated, and all our doubts are now set at rest.

With the skill of a practised anatomist, Mr. Clements has dissected his bow at various points, examined the materials of which it is constructed, and made a series of full-size diagrams of its transverse and longitudinal sections at different points, which I am now enabled to lay before you. (Plate XXXV.)

Here is the letter in which he describes to me the results of his latest investigations :

"12, Prince's Avenue, Liverpool.
5th May, 1892.

"DEAR BARON,

"Having concluded the examination of the bow, I have now great pleasure in handing you my completed notes, accompanied by a sheet of diagrams illustrating the same.

The bow is a composite one, consisting of tendon, wood, and whalebone, arranged in the following order: first or top layer, tendon; second, wood; third, whalebone; fourth and last, wood. This structure is encased in a sheet of tendon and covered by bark decorated with a painted design. A general dissection of the bow, together with a very close and critical examination of the different substances of which it is composed, now enables me to give you the following particulars :

The top layer, which I will call the shell of the bow, for it is of horseshoe section and encloses two of the other layers, consists of tendon mixed with some glutinous matter, the fibre running longitudinally. This shell is made up of several layers of the substance, but the number cannot be definitely fixed, as the division lines are very irregular even where most traceable.[a]

[a] Mr. Balfour and I both thought we could distinguish three layers, without counting the outer sheath of pure tendon described later.

It is evident from the serrated outline of these divisions, that each layer was allowed to become nearly dry and hard, and then had its surface channeled before another was placed on it, the moist layer readily moulding itself to the dry one. The fibres of this tendinous mass are much stronger and coarser on the inner side, and the colour is also much deeper at that part. The substance itself is $\frac{7}{16}$ inch thick in its centre, with $\frac{3}{16}$ inch edges,[a] continues about the same thickness throughout, and joining the whalebone at about one inch from the ends of the bow, provides solid material for the cutting of the nocks, and the insertion of a vertical core of horn which is inserted into the body of the bow at either end to a depth of $4\frac{1}{2}$ inches. (See Plate XXXV. figs. 1, 5, 6, and 7.)

The cores just referred to are not placed exactly in the middle of the bow, being a little nearer the front or bolt side of the bow (see Plate XXXV. figs. 4, 6, 7, and 8), and they are of close-grained horn, quadrilateral in section, $\frac{5}{16}$ inch thick at their extremities, and tapering down to $\frac{1}{16}$ inch at their termination about $4\frac{1}{2}$ inches from the ends of the bow.

Throughout their whole length they have the full depth of the body of the bow, and by passing through the different layers of which it is composed they materially assist in keeping them in position at those points where the strain of the string is greatest. (See Plate XXXV. figs. 2 at A, 3, 4, and a, b, c, and d.)

Further to strengthen the extreme ends, which would be apt to fray from the friction of the string or from a blow or other injury, they are protected by small curved tips of horn glued to the cores. There are two such pieces to each core at the back, and one on the front or bolt side. These last are somewhat smaller than the others and do not quite extend to the top of the cores.[b] Their form and disposition will be better understood by reference to Plate XXXV. fig. 1, at C and fig. 8.

It may here be mentioned that the whole surfaces of these materials wherever they come in contact with one another are rather deeply hatched or grooved, the incisions crossing one another diagonally. The object of this was to promote adhesion by holding glue or cement; and, by keying the pieces together, to prevent their slipping or separating with the action of the bow.

The next or second layer, after what I have called the shell, is of wood, yew, convex on the upper side to fit into the concavity of the shell, and flat at the bottom to sit on the whalebone. At the middle of the bow it is $\frac{1}{4}$ inch thick and tapers down until, at a short distance from the ends, it dies out to allow of the junction of the tendon and the whalebone. (See Plate XXXV. fig. 1 at C, and fig. 5.) The other layer of wood (the fourth layer), also yew, is of the full width of the body of the bow, and at the middle of the same is $\frac{5}{16}$ inch thick throughout its

[a] The edges are more or less cracked, and small pieces of horn have been introduced in places, evidently, as their insignificance and irregularity show, to make good deficiencies.

[b] The reason for this difference in construction on the two sides is to be found in the fact that the bow had to be set at a slight angle to the stock to allow free action to the string, and in consequence the strains on the two sides were not exactly alike.

width, gradually tapering down to $\frac{1}{16}$ at the ends of the bow. (See Plate XXXV. fig. 1 at C, and figs. 5, 6, and 7.)

The grain of both these layers runs longitudinally. One characteristic of yew, and in this in a measure also consists its strength and suitability for bows, is the peculiar arrangement of its fibre. In the placing of the layers the workmen did not neglect to utilise this peculiarity. Another quality that would render it peculiarly suitable for a bow like this one, which was built up damp, is mentioned by S. Boulger, F.L.S., F.G.S., in his *Familiar Trees*. He states that yew 'shrinks so little in drying as not to lose above $\frac{1}{48}$ part of its bulk,' and also that it 'is remarkably free from the attacks of insects.'

In a section which I made at the thickest part of the bow, extending a little more than one-half its width, I counted twelve distinct pieces of whalebone, so that if I say that this layer, which I have called the third, consists of twenty-one pieces of whalebone, I should not be far wrong. (See Plate XXXV. fig. 1 at D, and fig. 5.) These pieces are quadrilateral, of varying thickness, grooved on each side and fitted so closely that the joints are scarcely visible; indeed, the manner in which these small pieces are put together shows the most careful and honest workmanship, and the strong desire on the part of the workman to secure, by every means in his power, the integrity of the bow.

The layer thus formed is half an inch thick at the middle of the bow, tapering to three-eighths of an inch at the ends, the grain running vertically as well as longitudinally. Had the grain been placed horizontally, in which case one piece would have sufficed, the whalebone would have split and flaked under the strain.[a]

The whole body of the bow is covered over, encased as it were, with tendon in its natural state. The upper portion consists of one piece, which extends for its whole length and is then turned over at the ends and moulded into the nocks, thus not only concealing the insertions (cores and tips) but also binding and protecting the ends from injury. In width it covers the whole of the arched side of the bow, is one-eighth of an inch in thickness, and beveled off to a thin edge at the line of junction with the flat side of the bow. The fibre runs longitudinally, so that this tendon must have given a strong rebound to the bow when released. The outer coating of tendon on the under or flat side of the bow has its fibre placed transversely, and in consequence probably consists of a number of pieces carefully joined together. It is of the same thickness as the upper portion in the middle of the bow, but more attenuated as it approaches the ends. It is wider than the actual body of the bow by about half-an-inch on each side, and these flaps beveled to a sharp edge, are brought up over the arched tendon on either side in the manner of a splice and firmly attached to it. This tendon acts as a clamp and keeps the different materials of which the bow is composed from spreading or splitting longitudinally. (See Plate XXXV. figs. 1, 5, 6, and 7.)

A very fine bark is applied over all, in order to receive the decoration, portions of which still remain. The bark is probably one of the coats of the birch, for under the decoration and still

[a] I take it from my examination of this section, that the *fibre* runs longitudinally and the line of cleavage vertically.

adhering to the outer covering of pure tendon, are numbers of dark irregular streaks varying in length, and, as in the bark of that tree, clustered in some places, sparse in others. These marks appear both on the upper and under sides of the bow and run diagonally in both instances but in opposite directions, which shows conclusively that they are separate pieces, indeed this is confirmed by the slight lapping of the arched piece over the flat one, quite discernable at the edges of the bow, which still remain intact under the lashings.

The decoration is painted, and the design formed by a number of small, but very regular, yellow dots on a dark ground.

These dots are arranged in diamonds; and the central dot of each diamond in every other column being omitted, gives it a speckled appearance, reminding one of some reptile's skin. (See fig. 2.) Perhaps the early Saracenic bows may have been covered with snake skin, and this decoration may be a survival of that tradition; for I somehow have the impression that this peculiar style of decoration was originally intended to represent that substance.[a] As the pattern does not fit at either edge, for it is cut through quite sharply, we may infer that it was applied to the bark before the latter was placed on the bow.

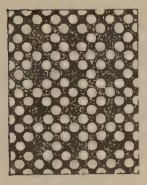


Fig. 2.
Pattern of decoration on cross-bow.
(Full-size.)

I have said the bark used is probably one of the coats of the birch. I believe it to be the outer bark of that tree; but as Mr. Balfour differs with me in this, for he writes, 'it seems to be always the inner bark of the birch,' I think it better to describe it as above. My conclusion is based upon a dissection I have made of a piece of the bark which I was enabled to procure, and also on the statements of two well-known writers upon trees. Prideaux John Selby, F.L.S., etc., in his *History of British Forest Trees*, says: 'In Sweden the outer bark, which may be termed imperishable (as it remains incorrupted for ages), is used instead of tiles or slabs as a covering for houses, and so completely does it resist decay that the Norwegians generally cover their bark roofs to a depth of a foot or more with earth. The Laplanders make their waterproof boots and shoes of it; the legs being taken entire from the trees, and therefore without a seam.' Again, the description given by G. S. Boulger, in the work already cited, of the structure and appearance of the outer bark confirms my view.

I may state, in conclusion, that what has impressed me most in the course of my examination is the extraordinary tenacity of the glue or cement used, for with it has chiefly depended the efficiency and the durability of the bow. When we consider the variety of materials, the manner in which they are put together, and the strain to which they have been subjected, as also the number of years that have elapsed since the bow was made, with is present compactness and

[a] In confirmation of this view is the fact that Mr. Riggs' bow, now admitted to be of the same structure as mine, was originally described as being covered with snake skin, and the same description was given to those in the Christian Hammer sale, May, 1892. I may add that Mr. Henry Balfour tells me that on the numerous composite bows which he saw in Scandinavia and at Berlin, "the dotted ornamentation on bark seems almost universal."

solidity, this tenacity becomes a matter of wonderment, and gives us cause to regret that its nature and composition are unknown to us.

I attach a key or explanation of the diagrams, and, with kind regards, remain,

Dear Baron,

Sincerely yours,

JOHN CLEMENTS."

Such are the results of Mr. Clements's investigation into the construction of this curious form of crossbow, an investigation which extended over several months and involved much correspondence, for the results were only arrived at slowly, Mr. Clements beginning them with the usually received idea that he possessed a bow of horn, and communicating to me each new disclosure obtained by a fresh cut into the bow, so that we might thoroughly discuss each feature brought to light. Indeed the bow was cut into and put together three several times, as new questions presented themselves, which needed great hardening of heart on the part of a collector of ancient arms such as Mr. Clements is.

But I feel that he has made a truly valuable contribution to scientific archaeology in thus determining the construction of a type of crossbow which had never hitherto been correctly described, and I am especially grateful to him for having unreservedly placed the results of his work at my disposal, and allowing me to communicate them to our Society.

To Mr. Henry Balfour, of the Oxford University Museum, my best thanks are also due. He followed our investigation with lively interest, and freely gave us the benefit of all the experience and knowledge he had acquired in the course of a similar examination of non-European bows. I must also thank Mr. A. B. Skinner, of the Science and Art Department, and Mr. M. F. Woodward, of the Royal College of Science, for aid rendered to us at the earliest stages of our inquiry.

It has now been shown how nearly the substances found in the bow by Mr. Clements correspond to those supplied to Robert l'Artilleur in the fourteenth century, the principal differences being that he employed ram's horn where whalebone is found in the latter bow, and apparently coated his bows with varnish[a] instead of with birch bark, of which no mention is made in his contracts. Pitch and tallow were also required by him, but their use must remain a matter of conjecture.

It may not be unprofitable now to consider how the workman probably proceeded in making these bows of the finer sort, such as the one above described. I may differ somewhat from Mr. Clements in the order in which I place the various operations, but I have thought the matter over carefully from a workman's point of view, and I cannot see otherwise how the requisite strength and close fit of the parts could have been obtained.

[a] There is a Venetian MS. in the British Museum (Sloane MS. 416), written by one Albertus Theotonicus, a friar spoken of in 1335 as having formerly introduced his methods into Venice, and one passage is headed "a fare vernixe da depinture e da *balestre*." (Eastlake, *Materials for a History of Oil Painting*, i. 86, 90, and 91.) He is supposed to be of German origin, hence called *Teutonicus*. (Communicated by J. G. Waller, Esq., F.S.A.)

I take it that in the first place the workman, having the twenty-one or twenty-three rods of whalebone of the requisite length, grooved them carefully on either side with a toothed scraper. He then glued them all firmly together, probably with fish glue, taking care that the ridges on one piece fitted into the grooves of the next, and he let the whole mass dry under considerable pressure to secure adhesion.

The upper and lower surfaces of the block of whalebone thus obtained would then be smoothed, and the whole tapered slightly in width and thickness towards the ends.

Thus would be formed the core or back-bone of the bow, and when this core was made of horn, as was most usually the case, the bow was called from it a horn crossbow.

It is necessary to discard from one's mind the possibility of making a bow, of the size needed for a crossbow, entirely of horn.

The supposition formerly existed, for references to horn crossbows are numerous in documents of the middle ages, but an inquiry into the practicable possibilities of constructing large bows entirely of horn has convinced me that in all these documents composite bows with a horn core are designated.[a]

Whether the construction of horn cores was exactly similar to that of whalebone cores, only the dissection of a bow with a horn core could tell, but it is certain that other materials besides horn always entered into the composition of the so-called *arbalestes de corne*.

When shaped, the upper and lower surfaces of the whalebone were scored with diagonal grooving, and the two layers of yew wood were glued to it. The outer one was arched on its upper surface, and the inner one was wider than the whalebone core by about a quarter of an inch on either side in the middle, the flange diminishing in due proportion as it approached the ends, and its width representing that of the body of the bow when ultimately filled up.[b]

When all this was dry, notches were cut in the ends of the structure, into which were firmly glued the horn cores, and to these were fixed the curved tips. I consider that these horn cores and tips were placed before any tendon was applied, because had they been inserted afterwards, they never would have had that close adhesion to the other components of the bow which was needed for the part they had to play in its structure.

What I may term the skeleton of the bow was now completed, and the flesh had next to be applied in the form of sinew or tendon. The document relating to Robert l'Artilleur proves that this sinew was shredded out into strands. After being steeped in water, a layer of this, strongly impregnated with glue, was pressed on to the arch formed by the outer layer of the yew and the

[a] 1248, "Pro 21 capitibus *cornuum* et 16 *glutinis* ad faciendum balistas 26*l*. 14*s*." (Compte d'Alphonse de Poitiers, p. 204). 1338, "Arbaleste de *cor et d'if*." (Comptes de Barth. du Drach.) 1346, "Balestas de *corn*." (Reglements de Montaubau, cited by V. Gay.) 1426, "2 grosses arbalestes de *corne* de revers grans." (Inventaire du Chateau des Baux, No. 61.) 1428, "quatre grans ars de *corne*." (Inventaire de la Bastide Sainct Anthoine.) The *gluten* in the first document is the tendon needed for the bow.

[b] The variety of yew most generally used for crossbows in France was "*if de Rouménie*," Roumanian yew. Four texts of the fifteenth century relating to it are given by V. Gay, *Glossaire Archéologique*, p. 47.

sides of the whalebone, all of which had been previously grooved. As this dried, it also was grooved longitudinally, and a second and a third layer were applied in the same way, each successive one having somewhat less glue in its composition, until the whole arch was built up. The nocks were to a certain extent formed during this process, and ultimately cut to the required depth. In drying, this coating of tendon would shrink, and produce the reflex curvature noticeable in many of these bows. The skin next had to be put on, and this consisted, for the arched side, of long strands of pure tendon, whilst for the flat side, transverse fibre was applied with a lap over on each side of half an inch, which was moulded up on to the arch at either side, so as to hold the whole thing firmly together. Lastly came the cuticle, which was formed of thin birch bark.

We have seen how impervious to damp this bark is, and my belief is that the object of this, as is the case with the human cuticle, was as much to keep moisture in, as to keep damp out. It is well known that when the oriental composite bows become perfectly dry, they lose all flexibility and will snap rather than bend. Before being used they often had to be softened in a bath, and gradually opened by cords attached to pegs in the ground.[a]

A certain amount of moisture is essential to the flexibility of these composite bows, and the crossbows above described are at present absolutely rigid and inflexible, no doubt through their thorough dryness.

This cuticle of birch bark had been decorated before it was applied. It was first stained or painted black or dark brown, and on this ground were applied the yellow dots. So extreme is their regularity that I think they must have been applied by means of a stencilling-plate. When this bark was glued on in two sections, as described by Mr. Clements, the bow was complete and only needed stringing and mounting on its stock.

The excellence of these German crossbows of the fifteenth century is attested by a passage in Gilles le Bouvier (A. D. 1455), quoted by Victor Gay.[b] He says, speaking of the Bavarians: "Ces gens sont bons arbalestriers à cheval et à pié, et tirent d'arbalestres de corne ou de nerfs qui sont bonnes, seures et fortes, car ils ne rompent point; et les arbalestres de bois et les arcs sont autres, ilz" (ceux de corne) "ne rompent quand elles sont gellées; et pour ce les font de corne . . . . et plus fait froid, plus sont fortes."

It shall perhaps add to the interest of this notice if I append a list of crossbow makers as far as I have been able to compile it. I must mention that I owe the notices of Spanish makers contained therein to the extreme courtesy of the Count de Valencia de Don Juan, the learned director of the Royal Armoury at Madrid, who has caused researches to be made in the Archives of Simancas and of the Crown of Aragon.

Readers of John Evelyn's Diary will remember the excellent account it contains of the crossbow shooting as still practised at Geneva in 1646, and in Flanders the same exercises continued in vogue even during the last century.

[a] Murdoch Smith, *Persian Arts*, South Kensington Museum Handbook.

[b] *Glossaire Archéologique*, p. 50.

The following list of bow makers is necessarily far from complete, but it may serve as a foundation for future research into the history of this interesting weapon:

*Makers of Crossbows, Bows, and Bolts.*

Acacio, crossbow maker, Spanish, cited by Alonso Martines de Espinar, huntsman to Philip IV., in his *Arte de Ballesteria y Monteria*, published in 1644.

Alanis, crossbow maker (Espinar).

Alexandre (Jehan), *Artilleur du Roy* (Charles V.), 1519-30. (Van Vinkeroy, *Catalogue des Armes et Armures*, Bruxelles, 1885, p. 242, and Böheim *Das Waffenwesen*, Leipzig, 1890, p. 659.) Made bows for Charles V. at Saragossa.

Ambrémont (Claude d'), master crossbow maker at Paris in 1532, and father-in-law of Pierre Conseil. (Baron Pichon, *Extraits*, t. 5.)

Armengou (P.), master crossbow maker of Barcelona in 1381. (Archives of the Crown of Aragon.)

Aubert, crossbow maker of Paris in 1738. (Piece signed by him at the Musée d'Artillerie.)

Azcoitia (Juan de), cited by Espinar.

Azcoitia (Cristobal de), grandson of Azcoitia the elder. Cited by Espinar.

Bagot (Gyllame), crossbow maker to Henry VIII., 1525. (*Archaeologia*, LI. 234.)

Balbastro, crossbow maker of Monzon in Aragon about 1530. (Böheim, p. 667.)

Baltasar, signature on a crossbow in the Real Armeria at Madrid, No. 579.

Baur (Hans), of Nuremburg, 1573. Signature on crossbow wind in the Armeria Reale at Turin, No. L. 19.

Blanco (Juan), maker of a number of hunting crossbows about 1551. There are nine by him in the Madrid collection, and one at Turin., No. L. 4.

Bletterie ( de La), crossbow maker at Paris about 1785. "Arquebusier et Archer du Roi et des Princes." Example at Dresden. (Böheim, p. 657.)

Breton (Pierre le), bowmaker of Liege about 1538. (Böheim, p. 659.)

Buckstede, fletcher to Henry VIII., 1528. (*Archaeologia*, LI. 234.)

Conrad (William), bowyer of the Tower of London in 1302. (Exchequer Rolls of Scotland.) Already mentioned in the body of this paper.

Conseil (Pierre), master crossbow maker of Paris, 1572. Son-in-law of Claude d'Ambrémont. (Baron Pichon, t. 5.)

Cottenat (*Maistre*), French crossbow maker, 1490. "Faiseur d'arbalestre d'assiez" (acier). (Journal de J. Aubrion de Metz, V. Gay, p. 42.)

Cormier (Thomas), crossbow maker of Angers, 1465. (Comptes du Roi René, V. Gay, p. 42.)

Criado (Juan), cited by Espinar, only made the stocks of crossbows.

Dancet (Pierre), master crossbow maker of Paris, 1575. Father-in-law of Remy Planchette (Baron Pichon, t.5.)

Daza (Juan), signature on a crosbow in the Madrid collection.

Dietrich, crossbow maker of Vienna about 1392. (Böheim, p. 645.)

Dumesnil (Robert), *see* Mesnil.

Escobar (Cristobal de), made crossbow bolts for Philip II. and Philip III. (Espinar.)

Escobar (Juan de), son of Cristobal. Bolt maker to Philip III. and Philip IV. (Espinar.)

Fernandez (Juan), signed a crossbow wind, of the middle of the sixteenth century, in the Madrid collection.

Fownset (George), bowstring maker to Henry VIII., 1533. (*Archaeologia*, LI. 234.)

Fuente (Juan de la), crossbow maker to Charles V. Two bows by him exist in the Madrid collection.

Fuente (Pedro de la), made crossbows for the Prince, afterwards Philip II. Two exist at Madrid. Also cited by Espinar.

Gajardo (Giacomello), crossbow maker of Venice, about 1400. (Böheim, p. 663.)

Gaugnart (Michel), master crossbow maker of Paris, 1552. (Baron Pichon, t. 4.)

Grageras, crossbow signed by him in the Madrid collection.

Guillaume, *l'Arbalestrier*, of Caen, 1355. 20,000 goose quills to be purchased in the neighbourhood by him, in order that he may put "*l'artillerie*" of the castle and garrison of Caen into good order. (Bibliothèque Nationale, dep. des MSS. quittances, t. ix., No. 316.)

Guillen (Juan), crossbow maker of Valencia in 1543. Supplied Philip II. (Archives of Simancas).

Haucher (Pierre), crossbow maker of Paris, 1488. (V. Gay, p. 42.)

Haye (Loys de la), crossbow maker of Bruges, about 1460. (Böheim, p. 659.)

Henry, *le Serrurier*, made crossbows at Brussels about 1304. (Böheim, p. 659.)

Hernandez (Juan), 1551. Example at Madrid, and cited by Espinar.

Hovorst (Jehan Van), crossbow maker of Mechlin, supplied Philip the Fair in 1501. (Vinkeroy, p. 243.)

Hortega, crossbow maker. (Espinar.)

Hyndy (Walter), fletcher to Henry VIII., 1510-12. (*Archaeologia*, LI. 233.)

Jean, *l'Artilleur*, Burgundian bow maker, 1400. (Böheim, p. 659.)

Jondoigne (Adrien de), master crossbow maker of Paris, 1568. (Baron Pichon, t. 3.)

Laake (John), arrowhead maker to Henry VIII., 1528. (*Archaeologia*, LI. 234.)

Langwile (William), fletcher to Henry VIII., 1528. (*Archaeologia*, LI. 234.)

Lastra (Juan de), worked for Philip IV., living in 1644. (Espinar.) Example at Madrid.

Leinhart (Peter), of Munich. Signature on a seventeenth century crossbow at the Musée d'Artillerie.

Leloup, or Le Loupe (Guillaume), crossbow maker of Lyons, 1418-1421. (Böheim, p. 658.)

Long (William), arrowhead maker to Henry VIII., 1530. (*Archaeologia*, LI. 234.)

Luviela (Alonso), signature on an example in the Madrid collection.

Luviela (Miguel), signature on a crossbow in the Turin collection, No. L. 4, of the middle of the sixteenth century.

Marcos (Alonso), crossbow maker to Philip II. in 1544.

Martinez (Juan), boltmaker, cited by Espinar.

Mehault (J.), bow maker of Arras, about 1419. (Böheim, p. 660.)

Mesnil (Robert du), or Dumesnil, surnamed le Normant, crossbow maker to Francis I. In 1528 he made the king eight crossbows with their winds for presentation to Henry VIII. of England (V. Gay, p. 42), and in 1537-8 twelve more fine crossbows for Francis I. (Comptes des batimens du Roi, dépenses secretes de Francois I. t. ii.) It would be interesting to know if any of those made for Henry VIII. could be traced at the Tower or at Windsor.

Mesnil (Nicolas), crossbow maker at Paris in 1578. (Baron Pichon.)

Michelet, bow maker at Nogent, about 1400. (Böheim, p. 658.)

Miguel, crossbow maker at Saragossa, about 1533. (Böheim, p. 670.)

Moreno (Luis), crossbow maker of Toledo. Twelve examples in the Madrid collection.

Muldre (Lucas de), crossbow maker of Brussels, about 1469. (Böheim, p. 660).

Munoz, *el de Getafe*, crossbow maker. (Espinar.)

Nostin, crossbow maker. Two examples in the Madrid collection.

Ora (Juan de), crossbow maker. Example in the Madrid collection.

Perez (Julian), bolt maker. (Espinar.)

Perez de Villadiego (Juan), crossbow maker. (Espinar.)

Peter the Saracen, crossbow maker to King John of England, 1205. Referred to in the body of this paper.

Piers, crossbow maker to Henry VIII., 1519. (*Archaeologia*, LI. 234.)

Planchet (Remi), crossbow maker at Paris, 1567. (Baron Pichon, t. 3), probably the same as

Planchette (Remy), crossbow maker of Paris, 1575, son-in-law of Pierre Dancet. Baron Pichon, t. 5.)

Puebla, *el Viejo*, crossbow maker of Madrid, in 1560. Two examples in the Madrid collection.

Pykeman (Henry), son of Thomas Pykeman, bow maker at the Tower, 1526-7. (*Archaeologia*, LI. 233 and 234.)

Pykeman (Thomas), bow maker to Henry VIII., 1513. (*Archaeologia*, LI. 233 and 234.)

Regnoult (Antoine), crossbow maker at Paris, 1572. (Baron Pichon, t. 5.)

Renedo (*the father*), bolt maker. (Espinar.)

Renedo (*the son*), bolt maker. (Espinar.)

Robert *l'Artilleur*, 1358-61, working for the castle of Rouen, already referred to in the body of this paper.

Rodrigues (Juan), crossbow maker, working at Milan in the sixteenth centuary. Example signed by him at Turin, No. L. 6.

Roquetas (Juan), crossbow maker of Gerona, in 1419. Alfonso V. of Aragon, in a document in the archives of the Crown of Aragon, speaks of steel crossbows made by him which were so small that they could be hidden in one's sleeve, and would wound or kill a man without his knowing whence the shot came.

St. Catherine (Pieron de), bow painter of Lille, about 1355. (Böheim, p. 660.)

Sandir (Jan), of Hannover, signature on a crossbow at the Musée d'Artillerie, dated 1669.

Santa Maria, crossbow maker. (Espinar.)

Scrojas (Juan de), crossbow maker to the Prince, afterwards Philip II. in 1537. (Archives of Simancas.)

Sordo de Zamora, crossbow maker. (Espinar.)

Tarrago (Francisco), crossbow maker to Peter IV. of Aragon in 1337. (Archives of the Crown of Aragon.)

Temple (William), fletcher to Henry VIII., 1528-9 and 1533. (*Archaeologia*, LI. 233 and 234.)

Tondeux (Jehan le), French crossbow maker in 1480. (Comptes de l'hôtel de Louis XI.)

Uzedo, crossbow maker. (Espinar.)

Valderas (Pedro de), wind signed by him in the Madrid collection.

Visin (Renaldo de), crossbow maker of Assolo, about 1560. Böheim (p. 666) cites an example at Venice.

Wagnart, (Pierre), crossbow maker at Paris, 1576. (Baron Pichon, t. 5.)

Wauryn (John), bow maker to Henry VIII., 1528. (*Archaeologia*, LI. 234.)

Xonnot, 1731, signature on the bow of a large crossbow in the Musée d'Artillerie.

## EXPLANATION OF PLATE XXXV.

Fig. 1. Front view of the bow with part of the stock. Left arm intact, showing the nocks. Right arm opened down from the end to the lashings, displaying the various layers longitudinally, with the outer covering of tendon, as also the small horn tips at *C*.

Fig. 2. Underside of arm, the outer tendon and wood removed at *A*, exposing the whalebone layer with the lower edge of the core projecting. The opening at *B* shows that there is no insertion or projection at that portion of the bow. The diagonal intersecting lines represent the channeling to promote adhesion.

Fig. 3. Longitudinal section of end of the bow, showing the extent and width of the core, its surface also diagonally channeled. *A* shows the wedge form of the core as seen from the top, and *B*, *C*, and *D* give its sections at the points marked.

Fig. 4. Underside of right end showing the manner of inserting the core, it being not quite in the centre but rather nearer the front side of the bow. This is also observable in figs. 2 at *A*, 6, 7, and 8.

Fig. 5. Cross-section of left arm taken at 12 inches from the end of the bow, showing the different layers and the outer covering of tendon.

Fig. 6. Cross-section at $4\frac{1}{4}$ inches from the end of the bow, showing the different layers with section of the core at that part.

Fig. 7. Cross-section at 2 inches from the end of the bow, showing the different layers with section of the core at that part.

Fig. 8. End view of right arm, showing disposition of the core and tips.

Note.—The bow is twenty-eight and a quarter inches long.

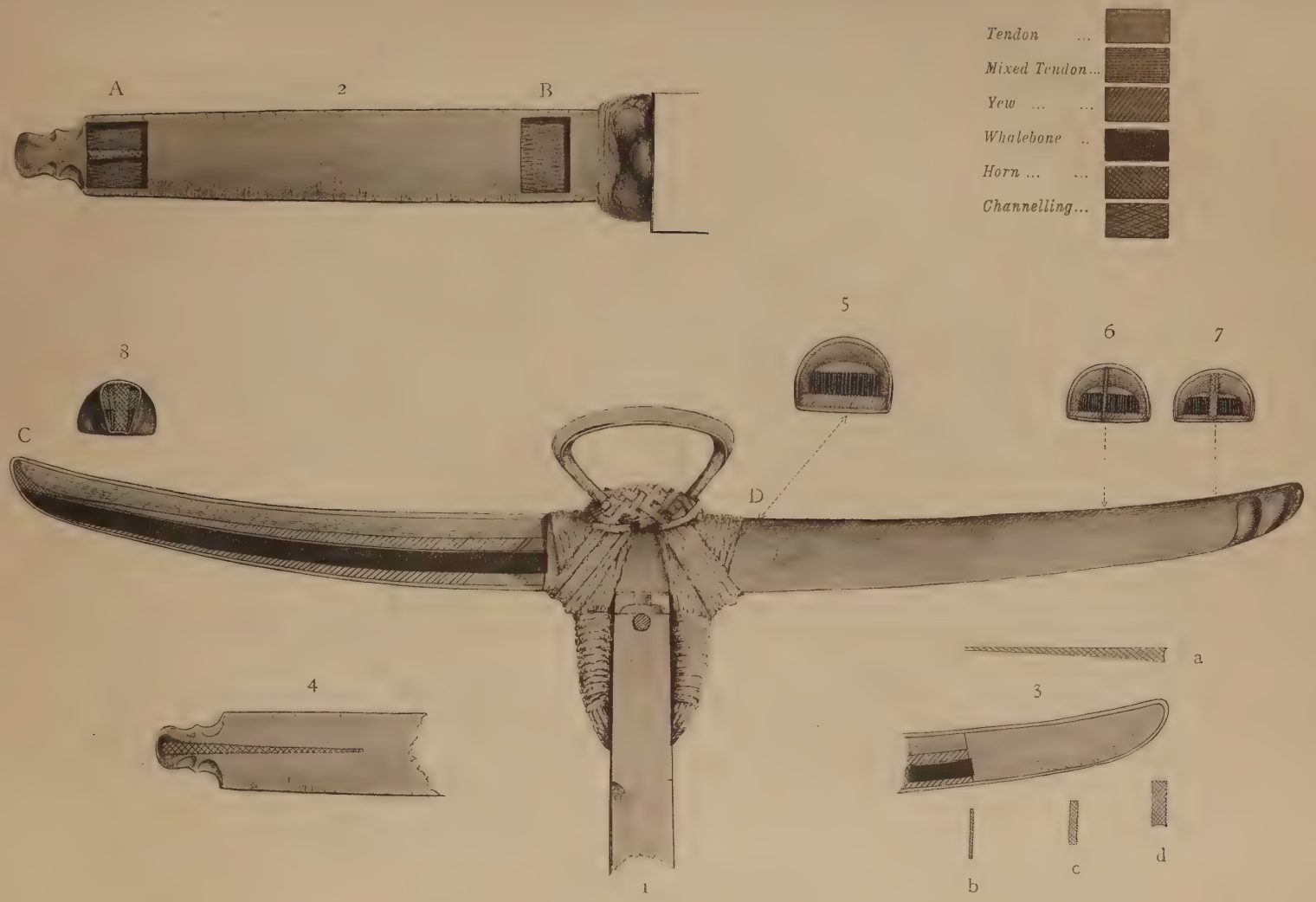



DIAGRAM SHOWING CONSTRUCTION OF CROSSBOWS.

*(From an example belonging to John Clements, Esq.)*

*(Scale, about ½ linear).*

# XX.—*On Offa's Dyke.* *By* T. M'Kenny Hughes, *Esq., M.A., F.R.S., F.S.A.*

Read January 28th, 1892.

There are few points in ancient history more interesting than an inquiry into the age and object of the great "dykes"; such as those of north Wiltshire, between central and southern England; those north of Cambridge, which bar the only access into East Anglia from the south; those which run from the estuary of the Dee to that of the Severn, cutting off the whole of Wales; or the great earthwork nearly parallel to the Roman wall which crossed the island from the Solway to the Tyne.

Were these the outcome of similar circumstances among various races and at many different times, or were those of even one district the work of the same age and of the same people, and if so whom were they thrown up to defend and whom to repel?

The object of this communication is to collect more evidence than has hitherto been put together with regard to the history and traditions respecting the earthworks referred to Offa; to criticise the value of that reference in the light of further observations along the boundary, and to suggest and commence an attempt at a more systematic grouping of the earthworks on the eastern frontiers of the Ordovices and Silures, with a view to the revision of Offa's boundary; and a determination of the ancient landmarks adopted and perhaps adapted by him, and possibly a recognition of prolongations made and gaps filled by him.

Dr. Guest has treated of the north Wiltshire dykes, which he refers to the advance of the Belgae. General Pitt-Rivers, however, informs me that he has ascertained that some of these belong to Roman times, as he has found Roman remains under the rampart.

Prof. Ridgeway[a] has recently shown a reasonable probability that the East Anglian dykes may be those referred to by Tacitus in his account of how Ostorius,

[a] *Proceedings of the Cambridge Antiquarian Society*, vii. 200-207.

having stormed the first line of these *agrestes aggeres*, caught the Iceni tangled among their own earthworks and defeated them with great slaughter. I had previously[a] added one to the number of these dykes by classing with them the earthwork known as the Roman road over the Gog Magogs.

The received notions with regard to the North British rampart too I have recently[b] had an opportunity of criticising, and have endeavoured to show that the Picts wall or *vallum* is a much older work than the Roman wall or *murus*.

I have also already expressed doubts as to the age of Offa's Dyke, and to this question I would now return with additional evidence.

In the *Brut y Tywysogion* it is stated that Offa made the great dyke known as Offa's Dyke after Mercia had been laid waste by the Cymry in 765; that the men of Gwent and Morganwg destroyed Offa's dyke in 776, and that after a subsequent devastation by the Cymry in 784, Offa made another dyke nearer to him. In another Brut, which is said to be older and in which the chronology runs in decades, it is recorded that in the decade 770 to 780 there was a great destruction of the Southern British by Offa.[c] Professor Rhys, however, tells me that the value of the Bruts as historical evidence is as yet but doubtful.

Asser Menevensis,[d] A.D. 910, says that by the directions of Offa a great *vallum* was made from sea to sea between Britain and Mercia,[e] and Simeon of Durham, whose chronicle ends in 1129,[f] repeats this in the very same words.

Higden in his *Polychronicon* speaks of it as *fossa*,[g] and says that it was *ad perpetuam Regnorum Angliae et Walliae distinctionem habendam*,[h] but wrongly describes its course, probably because he did not distinguish between Offa's Dyke and Wat's Dyke, which is nearly parallel to Offa's Dyke, the distance between them varying from 500 yards to 3 miles, and which was often confounded with it by earlier writers, and is generally described as if it were part of it by later authors. Speed speaks of Offa's Dyke as a bound set to separate the Welsh from the English.

In the chronicle of Caradoc of Llangarvan[i] referred to the twelfth century,

[a] *Proceedings of the Cambridge Antiquarian Society*, vi. 41-44.

[b] *Proceedings of the Cambridge Antiquarian Society*, vi. 355-361.

[c] *Archaeologia Cambrensis*, 3rd S. ii. 152-3.

[d] De Rebus gestis Alfredi, in the *Monumenta Historica Britannica*, 471.

[e] Wise, 10. [f] Ed. 1652, 118.

[g] This is probably the origin of the name Force Ditch, applied to part of the southern end of the earthworks referred to Offa.

[h] Cf. Gale, XV. *Scriptores*, i. 194.

[i] Reference in Ormerod, *Archaeologia*, xxix. 13, to Caradoc's *Welsh Chronicle*, ed. 1584, p. 19. Matt. Paris, *Vita Offæ Secundi*, ed. Wats. p. 27.

quoted in Dr. Powell's *History*,[a] it is stated that, in consequence of the "deep ditch" called Offa's Dyke being made, the royal seat of the princes of Powys was moved from Shrewsbury (Pengwern) to Mathyraval in Montgomeryshire.

Pennant gives an account of Offa's Dyke,[b] as does Hartshorne also in his *Salopia Antiqua*.[c] Dr. Geo. Ormerod and Mr. Longueville Jones have published several valuable communications on Offa's Dyke and Wat's Dyke in the *Archaeologia Cambrensis*.[d]

Dr. Ormerod[e] has given references to the *Polychronicon*, as well as to Camden and other writers, respecting the date and extent of Offa's Dyke; and Milman[f] refers to various documents in which the boundary between the Welsh and Saxons is mentioned. Wright[g] suggests that the principal object of Offa's Dyke was to prevent cattle-lifting; but he does not even notice the difficulty that the steep side is next Wales, as if the Welsh had thrown it up to prevent the English carrying off their cattle. Prof. Earle, on the other hand, brings forward evidence from the Saxon chronicles to show that there was a regular patrol service along the Welsh border with stations at regular intervals, but implies that the dyke was rather a boundary line for them to guard from trespass than a fortification for them to defend.[h]

Dr. Edwin Guest read a paper at Rhyl on the northern termination of Offa's Dyke, where he refers to the Book of Basingwerk, in which the word "terfyn" (*terminus*), a boundary, is frequently used for the dyke, and points out that it appears also in many local names.[i]

Similar dykes are found in other parts of England. For instance, Wan's Dyke, which runs from the neighbourhood of Andover, in Hampshire, across the centre of Wiltshire, and past Bath to Bristol, a distance of about 50 miles. This dyke is said to consist of a vallum and fosse, the fosse being on the north side; so that it was not likely that it could have been built by the Mercians, who were on the north side of it, if they also built Offa's Dyke which has the fosse, when there is one, on the Welsh or furthest side.[k]

[a] p. 20.

[b] *Tour in Wales*, i. 315, 351.

[c] Q^to^ ed. ii. 273, see *Archaeologia*, xxix. 13.

[d] 3rd S. ii. 1-23, 151-4, 155; v. 317.

[e] *Archaeologia*, xxix. 13.

[f] *Archaeologia*, xxxviii. 23.

[g] *Archaeologia Cambrensis*, 3rd S. iii. 311.

[h] Some notices of the dyke and protests against the destruction of parts of it will be found in the *Archaeologia Cambrensis*, 3rd S. iii. 204, 397-8.

[i] *Archaeologia Cambrensis*, 3rd S. iv. 335.

[k] *Archaeologia Cambrensis*, 4th S. vi. 275.

With regard to the name, Skeat says "There is a place called Wansborough, in Wiltshire, which is spelt Wódensburh in old books; *i. e.*, Wodensborough. Similarly Wan's Dyke is clearly Woden's Dyke; merely named after him, just as we build a street, and call it Victoria Street."

Some curious facts in connection with the various names applied to Offa's Dyke may be found in the paper by Professor Earle, in *Archaeologia Cambrensis*.[a]

He says that he found the dyke called Heyve Deyttch, Have Deytch, or Hof Deytch, which he thought might be only a corruption of Offa's dyke. While a friend of his suggested that the other forms might refer to its being the dyke which halves or divides the two countries. Dr. Hoopell informs me that Offa's Dyke at the southern end is locally called Off Ditch. Whatever may have been the original form, this suggests the idea of the off or far ditch, or that which formed the outside boundary. Professor Earle points out the rather remarkable coincidence of two parts of an extensive earthwork near Aynho, on the borders of Northamptonshire and Oxfordshire, being called the one Avesditch and the other Wattlebank. Corresponding to Offa's Dyke and Wat's Dyke.

In the south of Shropshire Offa's Dyke goes by the name of the Devil's Ditch.[b]

There are plenty of examples of conspicuous or artificial objects being referred to well-known characters of a past time. A natural rock table on the corner between Dyffryn Aled and the Elwy is called Bwrdd Arthur, while numerous artificial earthworks of various kinds in Wales and England are referred to the same king. Cæsar's camp at Folkestone has been shown by General Pitt-Rivers to be Norman. Cromwell gets credit for having thrown up innumerable British and Roman tumuli all over the country, in order from them to batter down some neighbouring church or castle. And, when local traditions do not suggest an earthly hero, bridges and dykes are referred to his satanic majesty's work; while natural hollows were his punch bowls, and queerly perched rocks offered him a seat. When the name of Offa became familiar, any earthwork which had a name of some similar sound might soon be called after Offa, and pedantic writers would invent a history in accord with the suggestion. Hwfa is a well-known Welsh name, and Careghofa was a strong castle near the dyke south of Oswestry.

It is not at all improbable that a pre-existing earthwork may have got called Offa's Dyke if it was fixed upon by Offa, or anywhere near Offa's time, as the boundary line between English and Welsh territory.

When a mountain tract is taken in under the Enclosures Act two things are done: the limits of common rights are defined, and a fence is put to keep the

[a] 3rd S. iii. 197-209.

[b] Parkins, *Archaeologia Cambrensis*, 4th S. vi. 275.

cattle and sheep from straying beyond it. One side may be cut up into small allotments, the other left open, and arrangements are made by which the labour or expense is divided among those concerned.

Having regard to the position and structure of Offa's Dyke, it is clear that much of it was well adapted for marking the territorial limits, and bounding the pasturage of a people who had flocks and herds which they wished to keep from straying beyond that limit. It would therefore be, at the time that name was given to it, a boundary to stop wandering, straying, or runaway cattle.

When inquiring about the age of the similar dykes on the other side of England, I asked Professor Skeat about the meaning of some of the names, Wat's Dyke and Fleam Dyke, for example; both of which he referred to Anglo-Saxon words meaning flight, wandering, straying. Wat as a man's name, he said, was only the short for Walter, and was Norman or Frankish and not Saxon at all; and yet if we insist that the whole of Offa's Dyke must have been thrown up by Offa, because of the name, we should also infer that Wat's Dyke was thrown up by some one of the name of Wat.

Mr. Hurrell tells me that the stream which runs from Chronicle Hills, near Triplow, was named Offa's Bourn; and that the bridge by which the high road near Foxton crosses it was known as Offa's Bridge: written Hoffer's Bridge on the Ordnance map. The Rev. E. Conybeare, of Barrington, while confirming the recollection of Mr. Hurrell as to the bridge having been formerly called Offa's Bridge, adds the curious fact that not long ago a farmer named Heffer took the adjoining farm, and that the bridge is now commonly called Heffer's Bridge.

Mr. Conybeare also mentions that in St. Ives there is a small street leading down to the river and now called Offa Lane, but that in old documents it is Offal Lane: which he interprets Off-fall from its position. Thus we find two sets of similar sounding words applied by the old English speaking people to dykes like Offa's Dyke in various parts of the country: Off Ditch, Hof Deytch, Have Deytch, Heyve Deytch, Avesditch; and Hwfa, Hofa, Hoffer, Offa, applied to various objects connected with them. In association with these we have Wat's Dyke, Wattlebank, Wan's Dyke, and may we add Watling Street.

If Offa, as recorded in the Brut,[a] made another dyke nearer to him, *i.e.* Wat's Dyke, after the great devastation by the Cymry in 784, why was not the second one also traditionally connected with his name. Wan's Dyke, from the analogy of Wansburh, as shown by Skeat, is probably Woden's Dyke; and as we must

[a] See above p. 2.

not infer that Woden made these, so we need not, on the strength of name, at any rate, infer that Offa made the others.

The traditional names do not therefore seem to go for much, and when the exact meaning and association of the words were lost, a similar sounding word, with an obvious meaning, was commonly adopted, as the name of the ship-of-war Bellerophon assumes in the mouths of sailors several forms having an obvious English meaning, or as the mottoes and signs over hostelries have been modified into words more intelligible to their frequenters. It does seem, therefore, probable that these dykes were simply recognised by the early English folk as bounds beyond which cattle might not stray nor huntsmen wander; a view strengthened by the fact that Offa's Dyke was known in Wales as *terfyn*, the Welsh form of *terminus*.[a]

It was not like a city boundary where people dwelt thickly on the inside of the walls. Probably there was no very dense population just along the dyke. Plenty of domestic cattle ranged over the low lands on the east and up the valleys on the west, where there were also rich hunting grounds. A strong fence to prevent the cattle straying beyond the limits arranged between two neighbouring clans, and a well-marked boundary to warn the eager huntsman off from the ground claimed by his powerful neighbour, would appear to have been a most natural thing to have made in any of these rough early ages, and most essential along a district which seems almost always to have been the border land between hostile races. The misunderstandings that might occur along a boundary not clearly marked by some obvious feature have been recently exemplified in the difficulties which have arisen between the French and Germans along their newly-defined boundary lines of Elsass Lothringen.

I endeavoured to make out the form of Offa's Dyke, which does not appear to have had much attention paid to it hitherto. It has been observed before that Wat's Dyke is a much stronger line of defence than Offa's Dyke, but what struck me most was that there is now no fosse at all along a great part of Offa's Dyke where it runs over rising ground. It seemed somewhat remarkable that if the line was in some places strengthened by a fosse, as if for defence, such an obvious addition would not have been made everywhere, especially when they were already digging earth to form the vallum, considering that all along the dykes of East Anglia, and in the case of most early earthworks there is a deep fosse, the earth from which, thrown up on the inside, forms the vallum, so that the

[a] See Guest *op. cit. supra.* p. 4.

ditch was next the enemy. There are exceptions, as in the case of the Irish raths, where the earth often seems to have been thrown up from the inside, and in some of the circular earthworks of the Lake district.

Seeing, however, that the steep scarp was always turned towards Wales, and that, when there was a fosse, it also was on that side, I thought it possible that there may have been one along the whole line, but that it had got filled up by farming operations and nature; and therefore, with the permission and kind assistance of Sir George Osborne Morgan, I dug at the base of the vallum in one or two places near Brymbo, and examined it carefully in other parts of the line. I was unable to make out that there ever had been a fosse at the bottom of the vallum where I examined it, but the brow of the hill seems to have been simply cut down on the side next Wales, and the material to have been thrown up to form the vallum thus

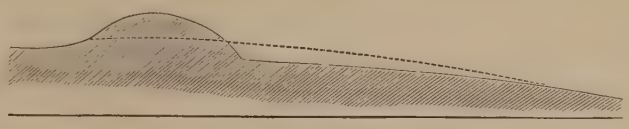


Fig. 1.

where the dotted line represents the original form of the ground. It may be that the fosse was further out and the vallum cut back in recent times, so that where I dug (*) was in reality under the vallum, the dotted line in fig. 2 repre-

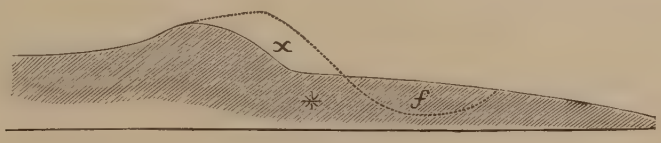



Fig. 2.

senting the original form of the dyke and the hard line the present form after the portion (*x*) had been thrown in to fill up the fosse (*f*), or perhaps spread over the land. But as far as I was able to go I found no traces of a fosse in those places where there is no fosse now seen.

Now let us see whether the form of the ground along which it has been carried will throw any light on the subject. We are at once met with the fact that no military engineer would have adopted such a line of defence, whether he held the east or the west side of the dyke. It is sometimes carried obliquely along the sides of the hills, so that, as it runs down the west flank, for instance, it is commanded by the hill above it on the east and, as it crosses the valley and runs obliquely up

the west of the valley and east slope of the hill beyond it, it is commanded from the west, as may be seen near Caergwrle. We must not, however, press this point too hard, as the ancient military engineers commonly carried their lines straight, but they generally strengthened the weaker places by double lines or outworks. The great length of the line to be defended, about one hundred miles from the mouth of the Dee to the estuary of the Severn, along which the dyke has been traced, though not continuously, for some seventy-five miles, is an objection to any of the explanations yet offered, but it presents greater difficulties in the way of our accepting the line-of-defence theory than any other. It would be impossible to man such a line, and if the English were scattered all along the line a compact body of Welsh could rush it anywhere. Besides, as has been shown, it is in many places more favourable to the Welsh than to the English. An earthwork like that, even with a pallisading on top, would, except where strongly defended, present no difficulty to men. And it would be easy enough to make a gap for cattle, especially if they were being driven from England into Wales.

It has always been taken for granted that Offa's Dyke was made by Offa and was not merely a series of pre-existing features selected by him and perhaps joined up to form the limit of his jurisdiction. Where the Wye formed the boundary no one says that he dug the channel of that river.

When the evidence of early writers that Offa made or fixed some kind of boundary along the whole Welsh frontier is admitted, it is assumed that it was probably continuous, and some similarity of design and strength is looked for along the whole line. But this is far from being the case, Offa's Dyke is not continuous, but occurs in long interrupted pieces, dying out just as do the East Anglian dykes. It does not run in a straight line along its whole course, but is made up of a number of more or less straight dykes inclined at various angles to one another, but all approximately coinciding with the boundaries of the lowlands and mountain lands.[a]

It is curious to compare a small scale map of England and Wales having the line of Offa's Dyke traced on it with one on which the margin of the mountain land is indicated, or an agricultural map on which the arable districts are distinguished from the pastoral. The boundary agrees marvellously in all three, so it is likely to have coincided with the most ancient tribal divisions; and in fact we find that the strong portions of it do coincide with the frontiers of the Ordovices and Silures as far as their territories can be defined.

Milman[b] in his paper on the *Political Geography of Wales* says, "The political

[a] Cf. Fosbroke, *Gentleman's Magazine*, cii. 2, p. 500 *et seq.* [b] *Archaeologia*, xxxviii. 19.

boundary of Wales originally coincided with its physical or geological boundary as laid down by modern science—namely, the line of the rivers Severn and Dee. But this was soon overstepped by the Anglo-Saxon invaders, who gradually forced the Welsh further to the westward and established a new boundary at first indeterminate, but at length defined by Offa's Dyke," but, he remarks, "the records of the treaty under which, and of the extraordinary means by which, Offa's Dyke was constructed, have long since perished."

It does not appear that the dyke had been traced continuously from estuary to estuary by any of the earlier observers. From an examination of the ground we should infer that it never can have existed in many of the places through which it must have run on the supposition of there ever having been a continuous line of demarcation of uniform character and strength constructed by Offa. There is no reason why it should have been artificially removed and all traces of it destroyed, and there are no natural operations which can have obliterated it in most of the cases referred to. An immense earthwork cannot have been entirely destroyed in any incursion, and moreover the only historic notice of such a destruction refers it to the Southern Welsh[a] and leaves unexplained the gaps in the northern part of the dyke. With regard to much of the ground we may safely say that if there are no traces there now the dyke never did run there.

Offa's Dyke cannot be followed to the sea at its northern extremity.[b] A few remains of an ancient earthwork can be traced running in a south-easterly direction from half a mile to a mile along the south-west side of the road from Newmarket[c] to Llynhelig, and the name of the nearest farm, Bryn terfyn (*terminus*),[d] may refer to this boundary, but it is a very different thing from the great fosse and agger which no cultivation has obliterated along the borderland further south in Denbighshire and Shropshire.

The direction of this Newmarket boundary would take us by the entrenched position known as Bwrddyrhyfel (the Battle Board), and passing by many a tumulus would run on to Bryn-y-Cloddiau (the Hill of the Dykes), about one mile and a quarter north of Ysceifiog.

Nothing is seen in the line of what is now called Offa's Dyke anywhere near the seaboard of Flintshire.[e] Yet the country next north of where traces are last

[a] See p. 2, inf. [b] 1 inch O.S. Map 79 N.W., 6 inch V.Va.

[c] 1 inch 79 N.E., 1 inch 79 S.E.

[d] Maesterfyn is, however, a long way from any dyke, and the word may mean the termination of a road or of anything.

[e] 1-inch 79 S.E. [e] 6-inch Flint vi.

seen has not been subjected to much surface change by agricultural operations. I should infer, from an examination of the ground, that there never has been any important earthwork along that line of country. Traces of what is called Wat's Dyke, however, exist east of the Strand Fields at Holywell, and again in, and north-west of Wern Sirk. As a caution against inferring too much from such names as *clawdd* or *terfyn*, I may point out that Tyddyn Cloddiau is the name of a farm a mile east of these earthworks, and there is a doubt as to whether the word should be cloddiau or tlodion. Bryn-y-Cloddiau is another similar name about one mile and a third north of Ysceifiog. *Clawdd* is used for any fence, and *terfyn* for the termination of anything. Nant-y-Flint,[a] and the ravines and escarpments by Bryngareg,[b] seem to have been sufficient protection or mark without any earthworks, but about three miles and a-half to the south-east we again find traces. It is worth remark that, although the farm close to the Soughton turnpike is called Clawdd Offa, and on the same dyke about one mile and a-half still further south-east we have Bryn Offa, and, close by, Llwyn Offa; these are all on Wat's Dyke.

Wat's Dyke[c] seems now to be better marked, and may be traced in a south-south-east direction about one mile and a-half east of Mold by Hope as far as Caergwrle.[d] The brow of the wooded slope then served for and helped to obscure the line; but opposite Gwersyllt Park[e] and by Bradley and Alwyn Bank[f] it can be followed till it rests on the British camp in the bend of the Alyn;[g] south of which on the other side of the river we pick it up again and trace it more or less continuously by Pentreclawdd near Rhuabon to Wynstay.

Curiously enough where we should expect the strongest defences, viz., the entrance to the fertile vale of Llangollen, we lose both dykes, and, when we find any dyke again, it looks like an independent earthwork flanking the strong entrenchments of Old Oswestry[h] on the north and on the south for about two miles and a-half, after which we see no more earthworks that can be referred to this line of defence.

Thus we see that what we have been calling Wat's Dyke and Offa's Dyke both terminate on the same latitude of Trefonen,[i] and a single series of disconnected entrenchments referred to Offa runs from this south.

The earthworks to which the name of Offa's Dyke is generally applied are

[a] 1-inch 79 S.E.
[b] 6-inch, Flint ix. Denbigh x.
[c] 1-inch 79 S.E.
[d] 6-inch, Flint xiii. Denbigh xv.
[e] Flint xiv.
[f] Flint xvii, Denbigh xxi.
[g] 1-inch 74 N.E.
[h] 6-inch, Shropshire xii N.W., xii S.W.
[i] Shropshire xix N.W.

first seen as pointed out above (p. 9) near Newmarket,[a] after which there is nothing that can with any certainty be referred to it for some fifteen miles to the south-east; but south of Treiddyn or Tryddyn a strong earthwork is seen, and from this point it can be traced by Nant-y-ffrith and over the hill west of Brymbo by Adwy'r Clawdd, between Minera and Wrexham,[b] and thence more or less continuously by Tanyclawdd, close to the camp known as Y Gardden, and so on west of Rhuabon. We pick it up again south of the River Dee as it flows out of the Vale of Llangollen into the low lying coal country on the east, and trace it south by Chirk Castle and Penyclawdd.

From Chirk it may be followed south along the county boundary of Denbigh and Shropshire,[c] south of Selattyn Hill, after which its course lies a little east of south through the Welsh part of Shropshire past Trefarclawdd to Trefonen. Then there is a gap of two miles defended by the camp near Whitehaven.[d] On the south of the road to Llanyblodwel, on Crickheath Hill,[e] another earthwork is seen running for about a mile south-south-west, and terminating in the strong entrenchments of Llanymynech Hill.

South of the River Vyrnwy[f] a long continuous dyke runs southerly by Llandysilio Four Crosses to the River Severn, on the east of which we find the entrenchments of the Breidden.

South of the Breidden[g] short interrupted banks are seen in the general line of Offa's Dyke; and, extending from Buttington along the east side of the Severn to Moel-y-Mab, near Leighton Hall,[h] a longer earthwork which ends, as has been already shown to be frequently the case, in the entrenchments of that probably British fortified position. The next earthworks referred to Offa commence about a quarter of a mile further east[i] and can be traced south-south-west with little interruption to beyond the camp at Nant.[j]

When we come down to the country about Montgomery,[k] dotted with tumuli and bristling with camps, we might expect to find that Offa would, if any where, have made a strong rampart. There are traces of earthworks here on the line along

[a] 6-inch, Flint xvii, Denbigh xxi.
[b] 6-inch, Flint xxxv, Denbigh xxi, Denbigh xxxix, Denbigh xliii.
[c] 6-inch, Shropshire Va. S.E., Shropshire xi N.E.
[d] 6-inch, Shropshire xi S.E., Shropshire xviii N.E.
[e] 1-inch 74 S.E.
[f] 6-inch, Shropshire xxvi N.W., Montgomery xi N.W., xi S.W., xvi N.W.
[g] Montgomery xvi S.W.
[h] Montgomery xxxiii N.E., xxxiii S.E.
[i] Montgomery xxiv S.E.
[j] Montgomery xxx N.E.
[k] 1-inch 50 S.E.

which Offa is supposed to have drawn his boundary, but they are interrupted and obscure, and what is very important for the purposes of our enquiry there are here other similar earthworks quite off the line of Offa's Dyke. It is supposed to run from the great north road through Montgomery, passing about a mile east of the town by Brompton Ditches, the name denoting its occurrence here, and so two miles further to the south-south-east into the Cwm. But there it ends. Another dyke less than a mile in length runs across Edenhope Hill to Mainstone, and there are traces of another crossing the hill by the camp on Upper Knuck. South of which there is nothing that could be referred to Offa's Dyke for many a long mile.

We find in this district much evidence in support of the suggestion that Offa did not make the great dykes that ran along the eastern boundary of the country of the Ordovices, but that he only selected and appointed as limits these and other artificial and natural features which occur here and elsewhere at intervals along the borders of Wales, possibly joining them up by lighter structures. For there are similar dykes further west, such as the "upper short ditch" and the "lower short ditch" at either end of Bonc-y-Saeson on the north-western borders of the Clun Forest, in the midst of a country covered with British camps and tumuli. The name implies that this area was contested in Saxon or English times also, but it is quite out of the line of Offa's Dyke, and the country near Montgomery was evidently the scene of many a battle long before the time of Offa. The Marrington Dingle, the precipices of the Corndon Hills, and the ridges of the Longmynd offered such fastnesses one behind the other, that it was likely that some strong line of defence would be required between them and the hills at the back of Montgomery and the gap through which the Camlad flows into the valley of the Severn. The Romans recognised the importance of this position by throwing up their camp at Fflos.

When we have crossed the Camlad[a] we find another bank passing Round Hill, which we follow south-south-east along the parliamentary boundary and on by Mellington Hall,[b] and south and south-south-east to where it is interrupted by the stream at Upper Edenhope.[c] Thence it runs past Mainstone,[d] takes a curious twist under the tumulus on Hergan,[e] and runs about one-third of a mile east[f] of

[a] Shropshire xxx S.E., xlvi S.E.

[b] Montgomery xxxvii N.E., Shropshire liii N.E.

[c] Montgomery liii S.E., Shropshire liii S.E.

[d] Montgomery xxxviii S.W., Shropshire liv S.W

[e] Shropshire lxii N.W., Montgomery xlv N.W.

[f] Shropshire lxii S.W., Shropshire lxix N.W., Shropshire lxix S.W., Shropshire lxxvi N.W., Radnor xi N.W.

the camp at Fron over Llanfair Hill, more than 1,400 feet above sea level, to Cwm Sannan Hill where its course is curiously irregular and interrupted.

From this it runs down by Knighton,[a] where its course is somewhat obscure, but we pick it up again on the south and trace it, interrupted at Rhosymeirch,[b] but recognisable over Hawthorn Hill and Furrow Hill, and from this traces can be followed south-south-west making straight for the camp known as Castle Ring,[c] opposite which it bends and runs across to the south-south-east so as to cover the low ground between the camp and east end of Evenjobb Hill;[d] thence we have to travel half a mile south-west to pick it up again when we find it running in a south-easterly direction to the Burva Bank British Camp on the borders of Radnor and Herefordshire. Half a mile south of this is an earthwork running round the west and south of Herrock Hill, and this also is called Offa's Dyke. From this point, on the strength of some small banks here and there, it is supposed to run as far as Lyon's Hall,[e] now taking an east-south-easterly course.[f]

Milman,[g] noticing the absence of any continuous rampart which could be referred to Offa at the southern end of the boundary between England and Wales, remarks that, "The southern portion of the dyke accompanies and sometimes seems to coincide with the lower course of the Wye."[h] But the fortified positions along the east bank of the Wye from Tintern to Chepstow are, like those common all round the west coast, only defended promontories or slopes above a landing place, and have no connection with one another. No one would have thrown up such earthworks to repel the tribes on the other side of the Wye, who had the whole line of the river to choose from, but they might have been useful in conflicts between those who held the uplands and those who came up the river to attack them.

Ormerod,[i] speaking of the earthworks near the mouth of the Wye, says that, "There are other lines defending the area," enclosed by them, "namely, the lines of Offa's Dyke which skirt the Wye in Tidenham; which lines Mr. Fosbroke (varying from received opinion) has considered as communications between the Roman camps thrown out to check the Silures," which must have "guarded the Trajectus in a most powerful force, and almost invincibly have protected the passage of the Severn through the numerous

[a] Shropshire lxxvi S.W., Radnor xi S.W.
[b] Radnor xviii N.W., Radnor xviii S.W.
[c] Hereford x N.W., Radnor xxv N.W.
[d] Hereford x S.W., Radnor xxv S.W.
[e] Hereford xvii N.E., xvii S.E., xviii S.W.
[f] Cf. Meyrick, *Gentleman's Magazine*, ciii. 1, 504.
[g] *Archaeologia*, xxxviii. 23.
[h] See also Fosbroke, *Gentleman's Magazine*, ci. 582.
[i] *Archaeologia*, xxix. 9.

garrisons which could have been collected against an enemy within a very few hours. A substructure by an earlier prince or nation is perfectly reconcileable with Offa's subsequent adaptation of these lines to his purposes; and the preceding observations tend, in some points, rather to confirm than otherwise this theory of a vast advanced position between the rivers. But it must be remembered that no Roman remains have been discovered here (except the uninscribed altar afterwards mentioned from Madgetts), and the difficulties arising from such want of authentication increase in proportion to the scale of the settlement or station which requires it. A Roman position defended on the sides towards the Wye by the lines attributed traditionally to Offa, and on the northern side by the earthworks at Madgetts and the Chase Hills would be nearly co-extensive with the entire parish of Tidenham, which contains about six thousand acres."

Those who support the view that the whole earthwork was constructed by Offa have to explain its unequal and interrupted character. It is not enough to say, in explanation, that it has been destroyed by agricultural operations or rased in some of the numerous incursions of the Welsh, for it is not so easy to obliterate all traces of an immense fosse and agger. It is still a strong line of defence in some places, while in other parts there is no evidence at all of the former existence of such a rampart. In the old tribal times a small encroachment on a neighbour's land was not worth while. There was plenty of room, and if they went to war it was for supremacy over a princedom. But when large alien races advanced towards the borders of Wales it might well be that some ruler would join up the disconnected entrenchments thrown up no one knows when, to check the border raids of the turbulent mountain tribes and to render cattle-lifting more difficult. What we have to do now is to try to work out the history of the successive earthwork builders; of those who strengthened a promontory by building a rampart across the isthmus; of those who protected a plateau by throwing up earthworks across the more accessible approaches; of those who fortified the whole of a hill top by running entrenchments all round, and doubling, trebling, or still further adding to them where the position was naturally less strong; of those who dug dykes across the whole front along which they considered themselves most open or liable to attack. What we have to ask now is whether a great part of the rampart attributed to Offa, the most important parts of which run along the eastern frontier of the Ordovices, might not have been constructed in the time of that powerful and warlike tribe. These portions were

[a] *Gentleman's Magazine*, N.S. iii. 491.

lines of defence probably thrown up across those districts where attacks were most common and where the enemy could be conveniently watched and waited for. When, if ever, they were joined up and formed a continuous line from the estuary of the Dee to the Severn it could never have been intended to defend the whole line, but still it might be a well-marked and probably stockaded boundary, to cross which implied violence and was a *casus belli*.

Thus we see that the historical record of the dyke being the work of Offa is untrustworthy, the nomenclature doubtful, and the archaeological evidence *nil*.

Had the question been quite open we should probably have had ere this much evidence accumulated to show that the Romans made it, or the Romanised British, to keep off the turbulent hill tribes of Wales; or the early Britons themselves in some part of the long periods during which the stronger races as they pushed forward from the south and east were driving the weaker into the mountains, and the tribal divisions which Cæsar found here were being formed, consolidated, and defined. Archdeacon Williams[a] long ago suggested that, whether the dyke were pre-Roman, Roman, or Saxon, might be proved by an examination of the places where the Roman roads cross the dyke, of which there were five or six, viz.: 1, near Caer Gwrle; 2, near Clawdd Coch, at the foot of Llanymynech Hill; 3, near Fordan; 4, near Kenchester (Magna); 5, near Chepstow; and 6, at the north end, where it crosses Sarn Hwlcin. But these Roman roads cross on low ground, where the dyke is generally absent; so that no satisfactory evidence has been obtained on this point.

Judging from the distribution of British and Roman camps, we should infer that it was along the line of Offa's Dyke that the strongest resistance had been offered to the advance of the Roman legions. "On the hill of Llanymynech, which adjoins the celebrated Offa's Dyke six miles south of Oswestry, the tide of Roman conquest had been stayed."[b] In a paper on Saxon earthworks,[c] by the late H. H. Lines, there are the following suggestive remarks:

> Watt's Dyke commences north of the camp of Llanymynech, at two miles and a half east of Offa's Dyke, the great boundary of the kingdom of Mercia. It proceeds east of Oswestry to the great camp called Old Oswestry, or Hendinas. At Gobowen it passes between two small camps at Bryn-y-Castell, and crosses the Dee two miles below Ruabon, and one mile east of Offa's Dyke. It then passes through Wynnstay Park, and about one mile beyond there is a place on the dyke called Pentreclawdd; this is exactly opposite a small round fort called Pen-y-

[a] *Archaeologia Cambrensis*, 2nd S. i. 72.
[b] *Montgomeryshire Collections*, vi. 377.
[c] *Montgomeryshire Collections*, xxvi. 237.

Gardden, on Offa's Dyke. At this point Watt's Dyke begins to widen its space to two miles, as it passes just outside to the west of Wrexham, and continues to widen up to the river Alyn, near Gresford, where there is a small trenched fort on the dyke, and in the middle of the space between the dykes is another Gaer. It then passes between Caer Estyn and Caer Gwrle, which are not more than half a mile apart. Soon after it turns north-west to within a mile and a half of Mold on the west. Here it appears to overlap the termination of Offa's Dyke, and passing to the west of Northop it terminates at Basingwerk Abbey on the Dee near Holywell, about fourteen miles beyond where Offa's Dyke is lost, after having continued its course nearly parallel to that dyke nineteen miles. Thus the entire length of Watt's Dyke is twenty-three miles, while that of Offa is sixty-one miles; Offa's Dyke extending forty-two miles south of the termination of Watt's Dyke, giving to Offa a line of rampart of seventy-five miles.

On the east side and within a range of one day's march of these two Welsh dykes, we might expect to find, if anywhere, certain camps originating with the Saxon invaders. But, after a careful examination of the country in the east and south of the dykes—that is on the Saxon side—we find on the entire length of seventy-five miles, from Basingwerk on the Dee to Byford on Wye, nine Roman camps and ten others, which being without any indication of Roman work, may be set down to that British, or Silurian, or Ordovician army against which the nine Roman camps were required to act. There is the same proportional equality if we continue the examination south from Sutton Walls camp as far as the Doward on the Wye, where the Roman legions appear in the Silurian war to have entered on the real business of the campaign. In this southern division there are eight Roman and eight Silurian camps, with three undoubted Saxon camps, showing the characteristics of high castellated mounds. Of one of the above Silurian camps, that of Wall Hills, near Tedbury, there can be no doubt that it shows extensive Roman work; and this exactly equalises the relative number of camps, as Wall Hills must have belonged in turn to both contending powers. The result is that we find eighteen camps clearly may be allotted to each army. If there was this equality of power as indicated in these thirty-six camps, where shall we find the Mercian or Saxon strongholds which Offa would require to garrison those long dykes—seventy-five miles? Clearly he found them in the old Silurian camps ready to his hand, and thus utilised them, even after they had been occupied by the Romans.

If the author of that paper had not been hampered by the necessity of referring the construction of the great earthwork to Offa, how much simpler to have suggested in explanation that Offa found in the old Cambrian dykes a succession of boundaries ready to his hand, and utilised them as they may also have been utilised in the time of the Romans, whose camps, faced by British camps along the whole frontier, tell more clearly than history or tradition that there was something here which long held in check the military power of Rome.

Mr. W. Trevor Parkins read a paper at Wrexham on Offa's Dyke and Wat's Dyke in which he gives some further details and references to various notices of the dykes, and refers to the discovery at Nantyffrith of Roman remains con-

tiguous to Offa's Dyke, and in such a position that they must necessarily have been deposited there before it was constructed.[a] These specimens have unfortunately got scattered and most of them lost, and it is now difficult to obtain any trustworthy information as to the exact position or the circumstances under which they were found.

I went to the spot and found the man who built the cottages close to the dyke, and with him and two other men dug in the gardens at the back where some of the material excavated in digging the foundations had been thrown, and I also examined the sides of the two streams which were cutting into another heap of rubbish from the same spot. There were great masses of concrete and Roman tiles and bricks. I saw no coins or any other objects that would exactly fix the date, and the evidence was altogether most unsatisfactory. Still I had no doubt that Roman remains had been dug up there, but I could not learn that any of these objects had been dug up under the rampart. On the contrary, all the evidence that I could collect on the spot went to show that they were found near or in the surface of the dyke but not under it. Just as in the case of the Devil's Dyke, which was cut through by the railway from Cambridge to Mildenhall, I saw the fresh cutting and noticed many Roman rubbish pits and interments along the top of cuttings adjoining the dyke, but though the original surface soil was clearly seen at the base of the artificial agger there were no Roman remains found along that line. A portion of an amphora and the bones of a horse were found at an inconsiderable depth from the surface of the dyke itself. These were probably buried in it, or thrown up with earth on to a pre-existing dyke to strengthen it in later, perhaps in Roman times. In this case the probability that these dykes were in existence when Ostorius marched against the Iceni in the third century A.D., has been well argued by Professor Ridgeway.[b] Had the excavations been carried on in Cambridgeshire in the same way as were those at Nantyffrith we should probably have had some story told of Roman remains under the original earthworks.[c]

In the first half of the eighth century Procopius wrote his histories and incorporated such geographical information as he could gather. As there was considerable intercourse between Gaul and Britain he introduces some notice of that island in his work *de Bello Gothico* :[d]

[a] *Archaeologia Cambrensis*, 4th S. vi. 275.

[b] *Proceedings of the Cambridge Antiquarian Society*, vii. 200-207.

[c] I have just received a letter from a Fellow of the Society, the Rev. Thos. Auden, written after he had received the notice of this meeting, informing me that he had a denarius of Vespasian which was picked up on Offa's Dyke, near to Llanymynech.

[d] *Procopius de Bell. Goth.* iv. 20, Niebuhr, 1833, p. 565.

The people who in old time lived in this island of Britain built a great wall which cut off a considerable portion of it. On either side of this wall the land, the climate, and everything are different. For the district to the east of the wall enjoys a healthy climate, changing with the seasons, being moderately warm in summer and cool in winter. It is thickly inhabited by people who live in the same way as other folk. Trees also flourish and bring forth their fruit in due season, and the field crops grow and are in no way inferior to those of other districts; moreover it appears that the district can boast of never failing springs.

But on the west of the wall everything is quite the opposite; so that, forsooth, it is impossible for a man to live there for half-an-hour. Vipers and snakes innumerable and every kind of wild beast share the possession of that country between them; and, what is most marvellous, the natives say that if any man crosses the wall and enters the district beyond it, he immediately dies, being quite unable to withstand the pestilential climate which prevails there, and that any beasts that wander in there straightway meet their death.

Whatever value we may attach to this description, we may, I think, assume that the geographer Procopius had heard a graphic account from merchants and travellers, probably mixed up with still extant accounts from the time of the Roman occupation, of some kind of wall forming a boundary between two very distinct and dissimilar parts of the island, and it is noteworthy that he refers it to an ancient prehistoric people, and says nothing about its running from sea to sea. Now, as we know that there are several dykes of unknown age in Britain, let us inquire to which of them his description will best apply, and whether the more fabulous parts of his story may not be explained by reference to local features and traditions.

No part of Offa's Dyke was then believed to be of earlier date than the time of Procopius. Procopius was therefore supposed to refer to the other wall which crosses the island from sea to sea, namely that known as the Wall of Severus, the more northern wall of Antoninus being out of the question, and no difference of date and origin having been yet suggested[a] between the Picts' Wall or earthworks known as "the Vallum," between the Tyne and Solway, and the Roman Wall of masonry known as "the Murus," which runs nearly parallel to it along its whole length. Now Procopius speaks of the wall as running north and south. This is true of Offa's Dyke but not of any of the great northern dykes. And, even if we allow for such a difference of orientation in the ancient geographers as would make Scotland extend to the east of North Britain, that would place the wild or Caledonian side on the east of the wall and not, as Procopius says, on the west. Besides we must

[a] *Cambridge Review*, ix. 195, 210, 227. *Cambridge Antiquarian Society*, vi. 355.

remember that we have little evidence of what even Ptolemy's own maps were like save some medieval sketches of what it was inferred from his statement of longitude, etc. they must have been. Perhaps this very description by Procopius helped to make the early geographers twist Caledonia round into an east and west position.

Procopius describes the country on one side of it as rich and well-watered, with crops and productive fruit trees, while that on the other side was just the contrary. There is no such difference between the districts on either side of the wall of Severus, which runs across an undulating country very similar along the whole line. But, if he is comparing the rich Cheshire plains and the fertile valley of the Severn on the east side with the rough scars and barren hills of Wales on the west, the description applies very well.

He says that the country on the east of the boundary wall was thickly inhabited by people who lived comfortably like the country folk with whom Procopius and his friends were familiar: there was nothing exceptional about their houses or them. But it was dangerous to cross the borders into the country of the Ordovices, or other fierce tribes of Wales. If he did so his life was not worth half an hour's purchase. Procopius having just said that the western area was full of wild beasts, then makes a quite contradictory statement about pestilential vapours which kill man or beast that ventures over the boundary. This could not apply to any of the dykes, nor indeed to any part of Britain, and may be much more easily explained by reference to the tradition that there was a well defined boundary between Wales and England, and that anyone who crossed that into the strangers' land was instantly put to death. In *Montgomeryshire Collections*[a] we read, "Near to this site, and alongside of Offa's Dyke, is a field called 'Erw Brock Pen,' or the gallows field, where in Saxon times, the Englishman passing over the boundary line was hanged, and the Welshman committing the same offence was mercilessly deprived of his right hand;" and we read in Speed (Radnorshire), "By Egbert the monarch was a law made, that it should be present death for the Welsh to pass over Offa's Ditch." This tradition may be of any antiquity and have been incorporated into English history at any time, and it is probable enough that severe measures, more or less legalised, prevailed at many different periods along that fiercely contested frontier.

There is also an easy explanation of his statements as to the prevalence of wild beasts, vipers, etc.: for wolves and bears were driven into the hills by the advance of settled occupation of the lowlands. They held their own throughout

[a] vi. 386. [b] Cf. Nicholson, *Cambrian Travellers' Guide*, p. 910.

Britain till long after the time of Procopius, but must have been always more numerous in the mountain districts. Beavers still lingered in Wales till the eleventh century. The story of the Afanc runs through all Welsh medieval legend. Vipers are still very common all along our west coasts, and on the warm limestone hills that bound the eastern margin of Wales and Devonshire. There seems therefore to be sufficient reason to ask for a re-consideration of the age of Offa's Dyke, to ask whether the evidence of Procopius is not as good as that of the Chronicles, whether the Roman and British camps marshalled along the frontier do not make it more probable that the long lines of earthwork, carried generally along the hill fronts and rarely across the valleys, belonged to the defensive systems of the Britons, or even of the Romans, or of the Romanised British, rather than that they were the work of the Saxons who, except in their cemeteries, have left hardly a wall or a potsherd to tell of their former existence.

This sketch, which is necessarily very incomplete, will, at any rate, I hope, throw sufficient doubt on the received theory to call for more careful examination of all the earthworks along the borders of Wales: not merely a search for traces of banks along the supposed line of Offa's Dyke, but an attempt to group the several parts of that which has been referred to Offa according to their construction and association with other similar works in each area; and further, to suggest the attempt to discriminate between the original earthworks thrown up for defensive purposes and banks which may have been thrown up in later times to connect those isolated entrenchments, and form a visible easily-defined boundary.

XXI.—*An Archaeological Survey of Cumberland and Westmorland. By* R. S. Ferguson, *Esq., M.A., LL.M., F.S.A., Chancellor of Carlisle; and of Lancashire North-of-the-Sands, by* H. Swainson Cowper, *Esq., F.S.A.*

Read April 28, 1892.

## INTRODUCTION

By R. S. Ferguson, Esq., M.A., LL.M., F.S.A.

I have the honour to lay before the Society an archaeological survey in which will be found the principal and most of the minor archaeological discoveries which have been made in Cumberland, Westmorland, and Lancashire North-of-the-Sands, in other words in the diocese of Carlisle and the parish of Alston, which though in the county of Cumberland is not in the diocese of Carlisle. The Survey is based upon the model of the able Survey of Kent by our Fellow Mr. George Payne, printed in *Archaeologia*,[a] with one or two deviations which I venture to think improvements. For instance, arranging the Topographical Index in three columns instead of four, so obtaining more space in the three left, while the duty done by the abolished column (Mr. Payne's second column) is discharged by appropriate cross-headings. In the first column, that headed "Locality," I have given, after the name of a place, the reference to the quarter (N.E., N.W., S.W., or S.E.,) of the 6-inch Ordnance Map in which the place is or should be marked. The labour of doing this is no light work, and the mere turning over and over of some hundred and fifty of these sheets entails considerable fatigue. But once done, its convenience to all using the index is obvious. Thus two places of the same name allocate themselves at once without the necessity of a long description, *e.g.* in Cumberland, Kirkland, 15 N.W. and Kirkland, 51 S.E. at once define and differentiate themselves. To a stranger the help given by this notation is invaluable, but even a Cumberland man may be excused if he does not know off-hand where to look for Belmont, Boat How, Carling Knott, Dunwalloght Castle, etc., or a Westmorland man for Crawdundle

[a] Vol. li. 447.

Wath, Hugill High House, Redlands Camp, etc. In one or two cases it has proved impossible to assign to a place a locality nearer than the half of the sheet, 26 N, 27 E, etc., and occasionally no nearer approximation can be got than the number of the sheet. These difficulties generally arise in the case of camps, earthworks, and finds recorded in the county histories of the last century, but which have been swept away by the great enclosures of commons at the end of last and beginning of this century. In other respects the lines laid down in the first paragraph of Mr. Payne's Introduction have been followed, but there are neither British coins nor palæolithic implements to record. Neolithic implements have been noted in the index, but not as a rule upon the map. The greater sign includes the less, that is where a place is marked as a Roman town or camp, it appears unnecessary to add the signs for foundations, coins, miscellaneous antiquities, etc. It has proved impossible to mark every single cairn; in some districts they are almost unlimited in numbers. A survey of the British settlement at Barnscar made by our Fellow Mr. C. W. Dymond for the Cumberland and Westmorland Antiquarian and Archaeological Society shows between three and four hundred cairns in a very limited space. Many cairns and barrows that must once have existed survive now only in place names, such as Latterbarrow, Stone Chest, etc. These are not included in the topographical index, they will have to be dealt with when the field names of the district are taken in hand, a necessary supplement, or complement rather, as it seems to me, to such an archaeological survey as this.

For Mr. Payne's heading or division of "Anglo-Saxon," I have substituted "Post-Roman," which in the counties dealt with in this survey includes very little Anglo-Saxon, but a great deal of Scandinavian, Norse, and Danish remains.

The assignments to the various classes may be open to criticism, and may appear inconsistent one with another, but many of the remains indexed are recorded only in the county histories of the last century and have since perished in the great enclosures of commons, which have already been mentioned. The writers of these works, though not without merit and knowledge, were men of the closet and the desk, given to searching among ancient records, but in the main ignorant of and careless about field archaeology.[a] They accepted implicitly such account as the local parson or schoolmaster supplied, and printed it without

[a] Dr. Burn, the learned Chancellor of Carlisle, and one of the authors of Nicolson and Burn's *History of Cumberland and Westmorland*, omits all mention of the great stone circle at Gamelands, though within a mile of his own house at Orton.

further inquiry, or without even visiting the place. Now that the remains have themselves perished, it is impossible to verify or to contradict the accounts. In other cases, where the remains do exist, a free use of the spade would probably help to many corrections, and would prove that many sites put down as Post-Roman or Roman had been occupied at far earlier periods. However, let each student of this survey turn up the references and judge for himself.

I have included in the index a few remains (three or four) which are not archaeological remains in the usual sense, but the Ordnance surveyors have marked them "tumuli," whereas the spade has proved them to be mere eskers or gravel knobs; the corrections are worth recording.

It would, I think, be out of place to burden this introduction, in addition to the Topographical Index, with a survey of the archaeological remains in Cumberland, Westmorland, and Lancashire North-of-the-Sands, or to go into the vexed question of the tenth iter. The first I have, for Cumberland, done elsewhere;[a] the second I decline to do. The Great Barrier of Hadrian, with its camps and roads, is a feature peculiar to Cumberland and to Northumberland, and its interest and importance overshadow all other archaeological remains in the district. Attention should be drawn to the elaborate system of roads and camps by which reinforcements could be rapidly brought up to any menaced part of the Roman territory. The proposed excavations at Hardknott Castle may possibly throw light upon the Roman topography of Cumberland and create an interest which may lead to the still more important work of excavating the camp at Old Carlisle near Wigton. A survey of the unenclosed fells in Cumberland and Westmoreland, such as my friend Mr. David Christison, M.D., F.S.A., Scot., has been making in several counties in Scotland,[b] would bring to knowledge many unknown hill forts snd settlements.

I may mention that in the case of the county of Cumberland, I have marked on my set of the 6-inch Ordnance Map all the archaeological remains specified in the Topographical Index, using the same symbols as on the map given herewith. (Plate XXXVI.)

[a] *A History of Cumberland*, by Richard S. Ferguson, M.A., LL.M., F.S.A. (London, Elliot Stock, 1890), chapters i-vi.

[b] *The Prehistoric Forts of Peebleshire*, *Proc. S.A.S.*, 2nd Series, ix. 13. *The Duns and Forts of Lorne, Nether Lochaber and the Neighbourhood*, xi. 368. *Forts, Camps, and Motes of the Upper Ward of Lanarkshire*, xii. 281.

# BIBLIOGRAPHY.

## KEY TO ABBREVIATIONS.

### ARCHÆOLOGICAL MAP OF CUMBERLAND, WESTMORLAND, AND LANCASHIRE NORTH-OF-THE-SANDS.

(1) In referring to books, the notation following has been used.

(2) The objects are divided into three sections, viz. :—

(i) Pre-Roman :

(*a*) Earthworks and tumuli. Where no date can be assigned to this class of antiquities, it is proposed to simply mark them as Earthworks.

(*b*) Megalithic Remains, Cists, Palæolithic and Neolithic Implements, Bronze Objects, as Celts, Palstaves, Spear-heads, etc., Sepulchral Relics, etc.

(ii) Roman, including Cemeteries, Interments, Tombs, and Sepulchral Relics, Foundations, Camps, Roads, Hoards of Coins, Pottery, Glass, Personal Ornaments, etc., etc.

(iii) Post-Roman, including Barrows, Cemeteries, Interments, and Sepulchral Relics, Coins, Glass Objects, etc., Personal Ornaments, Arms, etc.

### CUMBERLAND AND WESTMORLAND.

| | |
|---|---|
| A. | Archæologia. Soc. Antiq. Lond. |
| A. Æ., o. s. | Archæologia Æliana. 1st series. |
| A. Æ., n. s. | Archæologia Æliana. 2nd series. |
| A. B. C. | Ancient British Coins (Evans). |
| A. B. I. | Ancient Bronze Implements of Great Britain (Evans). |
| A. J. | Archæological Journal. Royal Arch. Inst. |
| A. S. I. | Ancient Stone Implements of Great Britain (Evans). |
| Arch. Mus. | Catalogue of Museum formed at Carlisle in 1859, during visit of Royal Archæological Institute. |
| B. A. A. | Journal of the British Archæological Association. |
| B. B. | British Barrows (Greenwell and Rolleston). |
| Br. and Br. | Britton and Brayley's Description of Cumberland and Westmorland. |
| B. R. | Britannia Romana (Horsley). |
| C. A. | Collectanea Antiqua (C. Roach Smith). |
| Cam. | Camden's Britannia. |
| C. C. | Carlisle—Historic Town Series (Professor Creighton). |
| C. F. | Carlisle, History of Diocese of. (Chancellor Ferguson). |
| C. and W. | Cumberland and Westmorland Antiquarian and Archæological Society's Transactions. |
| Corp. | Corpus Inscriptionum Latinarum, vol. vii. |
| D. S. | A Survey and Maps of the Roman Wall made for the Duke of Northumberland (MacLaughlan). |
| F. | Cumberland, Popular History of (Chancellor Ferguson). |
| G. M. | Gentleman's Magazine. |
| G. M. L. | Gentleman's Magazine Library (Gomme). |
| H. | Cumberland, History of (Hutchinson). |
| H. N. | Northumberland, History of (Hodgson), Pt. II, Vol. III. |
| Hou. | Housman's Description of Cumberland, Westmorland, and Lancashire. |
| Hut. | Hutchinson's Excursion to the Lakes. |
| Hw. | Westmorland, Topographical and Historical Description of (Hodgson). |
| I. B. | Iter Boreale (Stukeley). |

| | |
|---|---|
| I. C. | Itinerarium Curiosum (Stukeley). |
| I. S. | Itinerarium Septentrionale (Gordon). |
| J. i., ii., iii. | Cumberland, History and Antiquities of, Vol. I. Carlisle. Vol. II. Leath Ward. Vol. III. Allerdale Ward above Derwent (S. Jefferson). |
| L. | Cumberland, Magna Britannia Series (D. and S. Lysons). |
| L. S. | Lapidarium Septentrionale (Collingwood Bruce). |
| N. and B. | Cumberland and Westmorland, the History and Antiquities of (Nicolson and Burn). |
| Proc. S. A. o. s. | Proc. Society of Antiquaries of London. 1st series. |
| Proc. S. A. n. s. | Proc. Society of Antiquaries of London. 2nd series. |
| Proc. S. A. N. | Proc. Society of Antiquaries of Newcastle-on-Tyne. |
| Proc. S. A. S. | Proc. Society of Antiquaries of Scotland. |
| Roy. | Roy's Military Antiquities of the Romans in Britain. |
| R. S. M. | Rude Stone Monuments (Fergusson). |
| R. W. | The Roman Wall (Collingwood Bruce). |
| S. | Westmorland, History of (Sayer). |
| V. M. | Vetusta Monumenta. Soc. Antiq. Lond. |
| V. R. | Vallum Romanum (Warburton). |
| W. | Cumberland and Westmorland, History of (Whelan). |
| West. | West's Guide to the Lakes. 2nd edition. |


## LANCASHIRE NORTH-OF-THE-SANDS.


| | |
|---|---|
| Barb. | Prehistoric Remains of Furness and Cartmel (Barber). |
| Jo. | Sketch of Furness and Cartmel (Jopling). |
| Fur. | Furness Past and Present (Tweddle). |
| Lanc. | Lancashire, History of (Baines). 1836. |
| L. M. | Lonsdale Magazine (editor Briggs). |
| R. L. | Roman Lancashire (Thompson Watkin). |
| St. | Annals of Cartmel (Stockdale). |
| W. F. | Antiquities of Furness (West). 1805. |
| Whi. | Richmondshire, History of (Whitaker). |


O. S. Ordnance Survey 6-inch. This reference is only given when no other record has been found.

The numbers in the column headed "Locality" refer to the 6-inch Ordnance Survey sheets, and the letters to the quarter of the sheet.

# TOPOGRAPHICAL INDEX:—CUMBERLAND.

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | EARTHWORKS. | |
| Aiket Gate, 31. S.E. | Foundations and enclosures overlooking Tarn Wadling (*see* Castle Hewin) | H. i. 492 |
| Arthuret Church, 10. N.E. | Tumuli | Personal knowledge |
| Aughertree Fell, near Ireby, 47. N.W. | Three circular camps, each about 85 yards in diameter, with surrounding ditch and internal rampart. A pre-historic tumulus close by, *vide infra* on this page | C. and W. vi. 190 |
| Ditto, Thistlebottom, 37. S.E. | Small square camp | C. and W. vi. 193 |
| | PRE-ROMAN. | |
| Addingham, 50. N.E. | Megalithic remains. Stone circle, known as "Long Meg and her daughters." Cup and ring markings | H. i. 225-253; N. and B. ii. 448-449; L. cxxviii.; W. 502; Br. and Br. 146-147; Hou. 411-12; Hut. 108-118; G. M. L. Archæology ii. 71, 72, 319-21; B. B. 381; I. B. 47; R. S. M. 127; B. A. A. xxxiv. 31; Proc. S.A. n.s. x. 311; xii. 91-92; J. ii. 334; C. and W. v. 40; vi. 491; x. 271 |
| Ditto | Megalithic remains. A second stone circle with cist near "Long Meg." Cup markings | I. B. 47; C. and W. vi. 491; Proc. S. A. n.s. iii. 211, 258, x. 313 |
| Aigle Gill, near Aspatria, 35. N.E. | Stone implements, an adze and a double pointed stone | Proc. S. A. n.s. viii. 493; C. and W. v. 121 |
| Ainstable, Broomrigg Plantation, 32. S.W. | Stone circle | O. S. |
| Allonby, 35. N.W. | Stone hammer | Proc. S. A. n.s. viii. 491 |
| Arthuret, 6 and 10 | Bronze palstave | Arch. Mus. 6 |
| Askerton Park, 8. S.W. | Cairns (three) of stones | A. J. xi. 13 |
| Aspatria, 36. N.W. | Bronze palstave | A. J. xvii. 164; A. B. I. 86 |
| Aughertree Fell, Ireby, 37. S.W. | Tumulus with urns of British type full of calcined bones | C. and W. vi. 190 |
| | ROMAN. | |
| Addingham, 41. | Road [The Maiden Way] | H. i. 255; L. cxxxv. |
| Aikton, 22. | Road | C. and W. iii. 77 |
| Ainstable, 32. S.W. | Altar | Corp. 80 |
| Ainstable Low Hall, 32. S.W. | Copper coins, all now lost; (?) if not same find as *sub voce* Carlatten Low Hall | H. i. 199 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Roman—*cont.* | |
| Allerby, 35. S.E. | Road | L. cxxxvi. |
| Allonby, 35. N.W. | Road | L. cxxxvi.; C. and W. iii. 71 |
| Alston, 33. S.E. | Road [The Maiden Way] | L. cxxxv. H. i. 214; W. 509; C. and W. iii. 70; Hw. 22 |
| Ditto, 33. S.E. | Inscribed altar | A. xvii. 229 |
| Ditto, Garrigill, 42. N.W. | Field called Chesters | J. ii. 119 |
| Ditto, Hall Hill, 33. S.E. | Camp. Silver denarii: also in 1839 two bronze vessels | J. ii. 112 |
| Appletree, near Birdoswald, 12. S.W. | The Great Barrier of Hadrian. Additional entrenchments | F. 92; R. W. |
| Arlecdon, 62. S.W. and 77. N.E. | Road | L. cxxxvii.; W. 370; J. iii. 72 |
| Aspatria, 36. N.W. and 35. S.E. | Road; Outerside to Allerby | H. ii. 287; W. 203 |
| | POST-ROMAN. | |
| Aikton, Downhall, 22. S.E. | Moated mount and base court | H. ii. 482; W. 201; C. and W. vi. 194 |
| Aspatria, 36. N.W. | Gold armlet | A. Æ. o.s. ii. 269; A. xxii. 439; A. J. vi. 59; Arch. Mus. 14 |
| Ditto (Beacon Hill), 36. N.W. | Interment under a barrow in cist of cobble [boulder] stones, on which cup and ring markings. Sword (iron?) with guard ornamented with silver flowers; buckle and strap end of gold; dagger, horse bit, spur, axe (of iron?). Opened 1789 | A. x. 112; G. M. L. Archæology; i. 124; H. i. 288; Br. and Br. 200; Hou. 450-1 |
| | EARTHWORKS. | |
| Bassenthwaite Lake, foot of, 55. N.E. | Circular entrenchment on hill called "Castle How" | H. ii. 235; C. and W. vi. 510 |
| Belmont, Penrith, 58. N.E. | Cistvaen | O. S. |
| Bewcastle, Anstontown, 4. S.W. | Earthworks | A. J. xi. 223 |
| Ditto, crossing of the Black Lyne river by the Maiden Way, 4. N.W. | Foundations and enclosures, some called Roman camps | A. J. xi. 229 |
| Ditto, Cairnsfield at the Nook, Roanstrees, 3. S.E. | Five parallel cairns of stone each 150 yards long and a yard deep. Now gone | A. J. xi. 231 |
| Ditto, Green Knowe, 4. S.W. | Earthworks and foundations | A. J. xi. 223 |
| Bewcastle, Kettlesike Cross, 4. N.W. | Fortifications and earthworks | A. J. xi. 228 |
| Ditto, Shield Knowe, and Kiln Pot Knowe, 4. N.W. | Earthworks | A. J. xi. 225; W. 646 |
| Bleatarn, 17. N.W. | Tumuli | O. S. |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Earthworks—*cont.* | |
| Boat How, 73. N.E. | Cairns | C. and W. iii. 240 |
| Boothby, 18. N.W. | Tumulus | O. S. |
| Brampton Mote, 18. N.W. | Entrenched and fortified hill | H. i. 124, 128; N. and B. ii. 493; W. 649; Br. and Br. 128-9; Hou. 425; Hut. 261; D. S. 65-6; I. B. 58 |
| Brampton, 17. N.E. | Many natural eskers, often taken for tumuli | D. S. 65 |
| Burgh-upon-Sands, Hall Walls, near Hangman Tree, 16. S.W. | Ancient castle | H. ii. 510; D. S. 81 |
| | PRE-ROMAN. | |
| Barnscar, on Birker Fell, near Devoke Water, 83. S.W. | Extensive settlements, enclosures, walls, cairns, burials in urns | H. i. 562, 578; W. 377, 494; Br. and Br. 231; Hou. 471; Proc. S. A. o.s. iii. 227; C. and W. iii. 252, xii. (in the press); J. iii. 211 |
| Bewcastle, 8. N.W. | British Oppidum, afterwards Roman camp | Personal observation |
| Ditto | Six rude stone implements | Arch. Mus. 5 |
| Ditto | Stone adzes | Proc. S. A. n.s. viii. 494 |
| Ditto, Cairn o' th' Mount, Peelshill, 8. N.W. | Long barrow | A. J. xi. 219 |
| Ditto, Camp or Hemp's Graves, 4. N.W. | Bronze spear-head. Cairn opened about 1800; two stone cists, bones, urns with ashes, iron sword, bronze jug, Roman silver coins, (?) interments of different dates, *vide infra* | A. J. xi. 230, 231; A. B. I. 314; Arch. Mus. 5; H. ii. 563 |
| Ditto, The Curragh, Skelton Pike, 2. S.W. | Large cairn | A. J. xi. 233 |
| Ditto, 2. N.W. | Large cairn | O. S. |
| Ditto, Crosshill, near Lynesteads, 8. N.W. | Stone axe | A. J. xi. 218 |
| Ditto, The Shiel Knowe, 4. N.W. | Star fish cairn | A. J. xi. 225 |
| Ditto, on the White Lyne river, 8 and 4 | Cairns (? if natural) | A. J. xi. 227 |
| Binsey summit, 46. N.E. | Tumulus, near Ordnance mark | C. and W. iii. 245 |
| Birkenthwaite, Green How, 83. N.W. | Cairns and enclosures | C. and W. iii. 251 |
| Blackford, 16. N.E. | Polished stone celt | Proc. S. A. n.s. viii. 493 |
| Blencarn, 51. S.W. | Tumulus | O. S. |
| Blencow Bank, Hutton-in-the-Forest, 39. S.W. or 49. N.W. | Urns, incense cups, and burnt bones found in 1772 | H. i. 512; West. 142; J. ii. 438 |
| Blennerhasset, 36. S.W. | Stone hammer | Proc. S. A. n.s. viii. 491 |
| Bootle, 85 and 86 | Stone hammer, found in 1813 | L. cxxix.; J. iii. 127 |
| Ditto | Flint and quartz arrow-heads | Proc. S. A. n.s. viii. 491 |
| Brackenhill Tower, 11. N.W. | Cists and interments | Proc. S. A. n.s. xiii. 347, 348; C. and W. xii. (in the press) |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Pre-Roman—*cont.* | |
| Broadfield, Hesket-in-the-Forest, 39. N.W. | Polished stone celt | Proc. S. A. n.s. viii. 493 |
| Broadfield, Inglewood Forest, near Highhead Castle, 38. N.E. | Tumulus, circular enclosure, stone cists, bones | H. ii. 431; L. cxxix.; W. 521; Br. and Br. 178; A. x. 106 |
| Burnmore, Eskdale, 79. S.W. | Megalithic remains, stone circles, cairns, *see* Eskdale | Proc. S. A. o.s. iii. 225, n.s. xii. 91-2; C. and W. iii. 250 |
| Burn's Common, Threlkeld, 64. N.E. | Stone hammer | C. and W. i. 217 |
| | ROMAN. | |
| Baggerhay, or Baggrow, 36. N.W. | Road | L. cxxxvi. |
| Bank Head, near Lanercost, 12. S.E. | Inscription in limestone quarry | A. J. xvii. 74 |
| Ditto | Inscribed altars | L. clxx. |
| Bankhill Burn, near Lanercost, 12. S.W. | The Great Barrier of Hadrian<br>Road [the Maiden Way] | H. i. 74; D. S. 58; B. R. i. 153 |
| Bankhill House, near Lanercost, 12. S.W. | The Great Barrier of Hadrian | W. 148 |
| Banksburn, near Lanercost, 12. S.W. | Inscribed Rock | C. and W. i. 45; Corp. 141, 150 |
| Banks Fell and Head, near Lanercost, 12. S.E. | The Great Barrier of Hadrian<br>Watch towers | L. cxxxiii. |
| Banks Head, near Lanercost, 12. S.E. | Altars | L. cl.—clxxxiv. |
| Beaumont, 16. S.W. | The Great Barrier of Hadrian<br>Mile Castle | W. 148<br>D. S. 80; Corp. 162, 163, 164; F. 86 |
| Ditto | Inscribed stones | A. Æ. o.s. ii. 420; H. N. 301; L. S. Nos. 507, 509 |
| Ditto | Ditto | A. J. xliv. 121 |
| Beckfoot, *see* Mawbray | | |
| Bewcastle, 8. N.W. | Camp, formerly British Oppidum, inscribed stones, miscellaneous antiquities | H. i. 63, 92-4, 95; N. and B. ii. 477; L. cxlv.; W. 630-633; Br. and Br. 115; G. M. L. Romano-British, i. 20; B. R. ii. 270: A. xi. 69, 124, 217 |
| Ditto | Camp, formerly British Oppidum, inscribed stones, miscellaneous antiquities | C. and W. viii. 322; L. S. 378-380; Corp. 168-9; F. 75 |
| Ditto | Road [The Maiden Way] | H. i. 95; W. 630, 643; A. J. xi. 124, 217 |
| Ditto, 4. N.W. | Cairn opened about 1800, two stone cists, bones, urn with ashes, iron sword, bronze jug, Roman silver coins, *vide ante* (?) interments of different dates | A. J. xi. 230 |
| Bewcastle, Hillpasture, 4. S.W. | Earthworks of 22 yards square | A. J. xi. 221 |
| Ditto, Lynesteads, 4. S.W. | Foundations | A. J. xi. 218 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Roman—*cont.* | |
| Birdoswald, 12. S.E. | The Great Barrier of Hadrian<br>Camp [Amboglanna]<br>Inscribed altars and stones<br>Miscellaneous antiquities | H. i. 65-74<br>N. and B. 504-505<br>L. cxxxvii.-viii.<br>W. 689-690; Br. and Br. 118-120; Hut. 288-291; G. M. L. Romano-British, i. 20-23; D. S. 54; C. A. ii. 192, iii. 200; H. N. 206, 295; B. R. i. 107, 152, Bk. ii. ch. iii.; A. J. i. 392, xi. 1; A. Æ. o.s. iv. 63-75, 141-144, n.s. xii. 288; Proc. S. A. N. ii. 216, 217; Corp. 141-150 F. 93; L. S. 172-210 |
| Ditto | Bronze arm purse | A. J. xvi. 84 |
| Ditto | Silvanus, figure of | Arch. Mus. 11 |
| Ditto | Inscribed stone, found in 1883 | A. J. xli. 180 |
| Ditto | Inscribed altar, found June 29, 1886 | A. J. xliv. 118; Proc. S. A. n.s. xi. 208; C. and W. ix. 291 |
| Black Comb, 88. N.W. | Road at foot of | C. and W. iii. 13 |
| Blackford, 16. N.E. | Road | L. cxxxv. |
| Black Hall, 80. S.W. | Road | C. and W. iii. 338 |
| Bleatarn. 17. N.W. | The Great Barrier of Hadrian, inscribed altar and stone, Mile Castle | H. i. 122; L. S. Nos. 433, 465; Corp. 151, 153, 156; F. 90 |
| Blencow, 49. S.W. | Road | L. cxxxvi.; C. and W. iii. 78 |
| Bolton Pasture, 36. N.E. | Road | L. cxxxvi.; W. 209 |
| Bootle, 85 and 86 | Road, "the common High street" | H. i. 556; N. and B. ii. 16 |
| Bootle, Eskmeals near Ravenglass, 82. S.E. | Camp, altars and coins. Same place as Walls Castle, Ravenglass | H. i. 561, L. cxlviii.; C. and W. iii. 13, 71, 73, 79; J. iii. 125 |
| Borrowdale, 70. S. W | Road in | C. and W. iii. 79 |
| Ditto, Seathwaite Bridge, 70. S.W. | Part of the bridge | Proc. S. A. o.s. iii. 225 |
| Botcherby Lane, near Carlisle, 23. N.E. | Interments in lead coffins | C. and W. iv. 325. Personal knowledge |
| Bothel, Camp Hill, 46. N.E. | Camp, interments | W. 258 |
| Boustead Hill. 15. S.E. | Camp (?) | C. and W. i. 152; H. iv. 303 |
| Bow, and Little Orton, between, 23. N.W. | Sculptured stone now a gatepost, brought from Foldsteads, Kirkandrews | A. J. xxxvi. 178; C. and W. iv. 323 |
| Bowness on-Solway, 14. N.E. | The Great Barrier of Hadrian, camp, inscribed stones, and altars, miscellaneous antiquities | H. ii. 484-90; N. and B. ii. 214; L. cxl. W. 149, 151; Br. and Br. 191-2; Hut. 249-50 D. S. 87; Proc. S. A. N. ii. 240; B. R. i. 109, 158; ii. 267; C. and W. i. 212; H. N. 225, 303; L. S. 267-9; Corp. 164-5, 214; F. 82 |
| Ditto | Sepulchral slab, found 1879 | A. J. xxxvi. 178; C. and W. iv. 324, v. 125; C. A. vii. 232 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Roman—*cont.* | |
| Bowness-on-Solway—*cont.* | Rediscovered inscription, found 1879 | A. J. xxxvi. 423, xxxvii. 148 Proc. S. A. n.s. vii. 205; C. and W. iv. 530 |
| Brampton, Hawk Hirst, 17. N.E. | Camp, inscribed altar, miscellaneous antiquities, 5,000 coins [see next entry], found in 1829. Road | H. i. 124-5; W. 648-9; Br. and Br. 128-9; Hut. 261-6; D.S. 64; A. ix. 222; C. and W. i. 206; H. N. 233; L.S. 239 |
| Ditto, ditto | Urn with 5,000 coins, found in 1829 | A. Æ. o.s. ii. 209 |
| Brigham, Eaglesfield, 54. S.E. | Road, skeletons and sword | H. ii. 106; W. 297 C. and W. iii. 343 |
| Broadfield and Broadfield Common, *see* Stocklewath | | |
| Burdoswald, *see* Birdoswald | | |
| Burgh-upon-Sands, 15. S.E. | The Great Barrier of Hadrian, camp, inscribed stones and altars, miscellaneous antiquities | H. ii. 496, 500-3; N. and B. ii. 222; L. cxxxix.-cl.; W. 153; Br. and Br. 190; Hut. 247; D. S. 81-2; A. i. 308; A. Æ. o.s. 115; Proc. S. A. N. ii. 238; B. R. i. 108, 156, ii. 266; C. and W. i. 151; H. N. 221; L. S. 459-266; Corp. 162-4; F. 84-5 |
| Ditto | Inscribed altar | A. Æ. o.s i. App. 4 |
| Ditto | Inscribed altar | A. J. xxxix. 357; Proc. S. A. n.s. ix. 60 |
| Ditto | Curious head in pottery | Proc. S. A. n.s. xi. 210; C. and W. ix. 295 |
| Ditto, Speergarth Holes, 15. S.E. | Oak frames under the Murus of Hadrian's Barrier | A. Æ. n.s. xii. 171 |
| | POST-ROMAN. | |
| Beaumont, 16. S.W. | Moated mound, formerly Roman mile-castle | D. S. 80 |
| Beckermet, 72. S.E. | Pillar, with Runic inscription | A. Æ. n.s. vi. 61-2, 191-2; L. cci.; W. 459; J. iii. 308 |
| Bewcastle Churchyard, 8. N.W. | Obelisk, with Runic inscription | H. i. 80-92; N. and B. ii. 478; L. cxcix.-cci.; W. 635-44; Br. and Br. 116; A. xiv. 113-118, xxviii. 347; A. Æ. n. s. i. 149-95; Proc. S. A. n. s. xiii. 219; A. J. xi. 130 |
| Ditto, Baron's Pike, and Hazell Gill Crag, 8. N.E. | Runic inscriptions | A. Æ. n. s. vii. 82-4 |
| Ditto, Murchie's Cairn, 8. N.E. | Anglo-Saxon interment | C. and W. i. 320 |
| Bleatarn, 17. N.W. | Moated mound | H. i. 122; D. S. 71 |
| Brayton, 36. N.W. | Silver brooch, with triquetra ornament | Pennant's Scotland, ii. 44; Arch. Mus. 15 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Post-Roman—*cont.* | |
| Bridekirk, 45. S.E. | Font, with Runic inscription | H. ii. 246, etc.; N. and B. ii. 101-3; L. cxciii; W. 285; Hut. 224-9; A. ii. 131, xiv. 113-8, xix. 379, xxviii. 346; A. Æ. n. s. vi. 8-10, 107-8 |
| | EARTHWORKS. | |
| Carling Knott, 62. S.E. | Tumuli (?) | C. and W. iii. 247 |
| Carlisle and Wigton, between | Several tumuli | Hut. 236 |
| Castlesteads, Eaglesfield, 54. S.E. | Circular enclosure | C. and W. iii. 344 |
| Castle Carrock, near Brampton, 25. N.W. | Moated enclosures, one near the church, the other at Hallsteads | H. i. 178-9; W. 671; Hut. 266; Br. and Br. 137-8; C. and W. vi. 465 |
| Ditto Fell, near Brampton, Hespecke Raise, Cardunnock Pike, 25. N.W. and S.W. | Cairns of stones | C. and W. vi. 469; W. 671; H. i. 180 |
| Ditto, near Caldbeck, 48. S.W. | Settlements, stone walls, circle and enclosures, cairns | H. ii. 381-7 |
| Castle Hewin, near Tarn Wadling, 31. S.E. | Foundations and enclosures, *vide* Aiket Gate | H. i. 492; Br. and Br. 140-1; J. ii. 225 |
| Castle Sowerby, Castle How, 38. S.W. | Fort | H. i. 520; W. 519; Br. and Br. 171; J. ii. 138 |
| Ditto, How Hill, 38. S.W. | Circular enclosure | H i. 520; W. 520; Br. and Br. 171-2; J. ii. 140 |
| Cawfell Beck, 73, N.E. | Cairns | C. and W. iii. 249. |
| Cockermouth, Fittswood, 54. N.E. | Triangular enclosure, rampart and ditch | H. ii. 119; W. 301 |
| Ditto, The Toothill, 54. N.E. | Tumulus | H. ii. 119; W. 301 |
| Crosby-on-Eden, 17. N.W. and S.W. | The Bishop's Dyke (otherwise the Baron's or Barras Dyke, dividing parishes of Crosby and Irthington) | C. and W. vii. 271; W. 157 |
| Crossfell, Green Castle, 41. S.E. | Semicircular fortification | H. i. 263 |
| Cumrew, 32. N.W. | Earthworks known as Dunwalloght Castle, foundations | H. i. 182; W. 672; Br. and Br. 138 |
| Ditto | Cairns | H. i. 182; Br. and Br. 138 |
| Cumwhitton Commons, 24. S.E. | Square entrenchments | H. i. 177 |
| Ditto, Castle Hill, 24, S.E. | Fort | O.S. |
| Cunninggarth, near Shawkbeck, 30, N.W. | Square camp and barrows | H. ii. 444; L. cxlviii.; W. 162 |
| | PRE-ROMAN. | |
| Carlatton, Saughtree Gate Farm, 25. S.W. | Cairn, bronze implements | H. i. 184 |
| Carlisle | Stone hatchets | A. ii. 118; H. ii. 651 |
| Ditto | Perforated axe of stone | A. ii. 118; A. S. i. 179 |
| Ditto | Pestle of stone | A. J. xxiv. 253; A. S. i. 228 |
| Ditto, Caldewgravelbed | Interment in cist | Proc. S. A. n. s. viii. 392 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Pre-Roman—*cont.* | |
| Castle Carrock, near Brampton, Garthhead, 25, N.W. | Pit dwellings, earth ovens | C. and W. vi. 462-3 |
| Ditto, Cardonnock Pike, 25. S.W. | Pit dwellings | C. and W. vi. 464; C. and W. vi. 495 |
| Ditto | Flint knives | A. S. I. 295; B. B. 379-80 |
| Ditto, Leafy Hill, 25, N.W. | Barrows, *see* Gelt Bridge | B. B. 379-80 |
| Corney, 85 and 86 | Flint arrow-head | Proc. S. A. n. s. viii. 491 |
| Croglin, 32 | Stone moulds for casting bronze implements | Proc. S. A. n. s. x. 16; Proc. S. A. S. 2nd series, vi. 103; C. and W. vii. 279; A. J. xlii. 481 |
| Croglin, 32 | Urn with calcined bones | A. Æ. o.s.; Catalogue 3; Proc. S. A. N. iii. 434 |
| Culgaith Moor, Kirkland, 59. N.E. and 60. N.W. | Mounds and urns with ashes, found 1775 and 1784 | H. i. 262; J. ii. 451 |
| Cumwhitton, King Harry Fell, 32. N.W. | Megalithic remains, stone circle called "Grey Yauds" | H. i. 175; N. and B. ii. 495; L. cxxix.; W. 673; Br. and Br. 136-7; C. and W. vi. 468 |
| | ROMAN. | |
| Caermote, 46. N.E. | Camps | H. ii. 235; West's Guide to the Lakes, 120; Proc. S. A. o. s. iii. 224; C. and W. iii. 43, 76, 243-5; vi. 191 |
| Caldbeck, Pikeless Gate and Wath, 37. S.E. | Road | W. 221, 224 |
| Ditto, Street, and Hesket Newmarket, 39. S.W. | Road | W. 221 |
| Calderbridge, 78. N.W. | Road | C. and W. iii. 340 |
| Ditto, In Fell | | |
| Campfield, near Bowness on Solway, 14. N.E. | Supposed camp, found to be shingle ridges. Mounds in vicinity contain Roman pottery, bones, charcoal | C. and W. iii. 72; Proc. S. A n. s. viii. 395 |
| Carlatten Low Hall | Copper coins, *vide* Ainstable Low Hall | H. i. 184 |
| Carleton, 24. S.W. | Road | W. 187 |
| Carlisle | The Great Barrier of Hadrian, town, inscribed stones and altars, coins, and miscellaneous antiquities | H. ii. 587, 650 etc.; N. and B. ii. 228; L. cxlvi.-vii.; clxxxvi.-vii.; W. 139-40; D. S. 75-7; Br. and Br. 96-7; Hut. 238—40; I. S. 96; I. B. 54; B. R. i. 114; A. Æ. o. s. i. App. l, n. s. xii. 163-9; L. S. 245-58; H. N. 219 *n.*; Corp. p. 161-2; F. chapter vi. 87, *et passim* |
| Ditto, Annetwell Street | Inscribed and sculptured figure, coins, vase of grey clay | A. J. xxxvi. 154; C. and W. iv. 324; Proc. S.A. n. s. vii. 357 |
| Ditto, Bank Street | Bronze winged bat or griffin expanding into acanthus leaf. Gold ring with representation of panthers drinking. Stockade. Axe of iron. | A. J. xxxv. 298; xl. 240; Proc. S. A. n. s. vii. 356; C. and W. iii. 134, 141; iv. 91; vii. 116; B. A. A. xxxiii. 525; xxxiv. 260 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Roman—*cont.* | |
| Carlisle, Blackfriars Street | Bronze bust, small, with Roman coins. Found 1877 | Proc. S. A. n. s. vii. 356 |
| Ditto, Blackfriars Street | Pillar and pavement, found 1891 | Proc. S. A. n. s. xiii. 263 |
| Ditto, Blackfriars Street, White Horse | Pillar (now at Tullie House) on concrete pavement | Personal information; Proc. S. A. n. s. xiii. 263, 264 |
| Ditto, Caldew Holmes | Sculptured stone [upper part of a male figure]. Urn with ashes and bronze ring found with it. Found 1862 | A. J. xix. 176<br>B. A. A. xx. 84 |
| Ditto, Castle Hill | Hooded figures, group of three | A. 139; J. i. 329 |
| Ditto, Castle Bank | Altar, small, without inscription | Arch. Mus. 11 |
| Ditto, Castle Sauceries, near Windy Corner | Altar. Found 1884 | Proc. S. A. n. s. x. 154; C. and W. viii. 317 |
| Ditto, Cathedral Precincts | Bronze lamp, Samian ware, bronze chape or bouterolle of a scabbard, 1859 | Arch. Mus. 9 |
| Ditto, The Citadel | Vase | A. Æ. o. s. i. Catalogue 7 |
| Ditto, Citadel Row | Stockade | B. A. A. xxxiii. 525, xxxiv. 260; C. and W. iii. 134, iv. 91 |
| Ditto, Devonshire Street | Bath, remains of, pillars, vase with several faces moulded on it. Found 1830 | J. i. 330; Arch. Mus. 9 |
| Ditto, Devonshire Street | Two-handled vase with *graffiti*. Found 1863 | A. J. xxi. 88; xxxviii. 295 |
| Ditto, River Eden | Bridge and wath | C. and W. ix. 167; Proc. S. A. n. s. xi. 209 |
| Ditto, near River Eden | Bronze female head | A. J. xxxv. 298; C. and W. iii. 141; Proc. S. A. n. s. vii. 356 |
| Ditto, English Street, Blair's shop | Deae Matres, group of | Proc. S. A. N. i. 15 |
| Ditto, English Street, Bush Hotel | Stockading and road, vase, pottery, coins, tanks of oak | B. A. A. xxxiii. 525, xxxiv. 260; C. and W. iii. xxv. 134, iv. 91; Proc. S. A. n. s. vii. 216, 356 |
| Ditto, English Street, Journal Office | Inscribed stones and miscellaneous antiquities, found 1860; *also* diminutive gold ring inscribed AMA ME | A. J. xvii. 73, 159, 182 |
| Ditto, English Street, White Swan | Deae Matres, group of, bronze lamp. Found 1883 | Proc. S.A. n. s. ix. 327, x. 15; C. and W. vii. 114 |
| Ditto, English Street | Inscribed stones | A. Æ. n. s. v. 98-9, 109, 138, vi. 52 |
| Ditto, English Street, Ling's premises | Bronze beaded torque | Proc. S. A. n. s. viii. 534; A. J. xl. 240; C. and W. vi. 196 |
| Ditto, Fisher Street | Silver coins, large number. Found in 1782 | J. i. 324 |
| Ditto, Fisher Street | Group of four figures under an arcade. Found 1855 | Arch. Mus. 7 |
| Ditto, Fisher Street | Tile with G VIII., vases, pottery | Proc. S. A. n. s. xiii. 219; A. J. xlix. 199 |
| Ditto, Gallows Hill | Cemetery, urns, lachymatory, inscribed sepulchral monument, ashes, bones, vases, pottery, antique gem. Found in 1829 | G. M. L. Romano-British, i. 29; A. Æ. o. s. ii. 419; J. i. 322; Arch. Mus. 11; A. J. iii. 76 |
| Ditto, Gallows Hill | Sepulchral monument to a Greek citizen interments | C. and W. xii. 365 |
| Ditto, Gaol | Tank of oak, pitcher with green glaze, coins, sandals | A. Æ. o. s. ii. 313; J. i. 331; Arch. Mus. 9 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Roman—*cont.* | |
| Carlisle, Grapes Inn cellar | Altar | H. ii. 652; J. i. 329 |
| Ditto, Grey Street, London Road | Cemetery, cist with glass vase and bones. Found 1863 | A. J. xxi. 88; xxxviii. 295 |
| Ditto, near London Road | Head in stone, probably from a sarcophagus: an "enamelled vase with bones," said to have been found with it, 1878 | A. J. xxxvi. 177; C. and W. iv. 89 |
| Ditto, London Road | Stone with serpent coiled round it | Proc. S. A. n. s. vii. 142 |
| Ditto, Market Place | Gold coin of Vespasian | Proc. S. A. n. s. ix. 327 |
| Ditto, Murrell Hill | Sepulchral slab, female figure with child and fan, road, vase, pottery, glass. Found 1878. | A. J. xxxvi. 177; B. A. A. xxxv. 103; C. A. vii. 232; A. Æ. n. s. xii. 205; Proc. S. A. N. iii. 14; Proc. S. A. n. s. viii. 206, 537 |
| Ditto, New Markets | Group of Deæ Matres, lamp, whetstone, pottery, enamelled brooch, sandals, blank altar, corbel with carved head, a few coins | Proc. S. A. N. iii. 307; Proc. S. A. n. s. xii., iii. 168, 423; C. and W. x. 275; xi. 100; A. J. xlvii. 267; B. A. A. xliv. 197 |
| Ditto, New Markets | Seahorse in bronze, now in British Museum, large number of silver coins, surreptitiously got by dealers | Personal information |
| Ditto, The Sands | Millstone | A. Æ. o. s. i. Catalogue 3 |
| Ditto, Scotch Street | Gold ring with intaglio of paste | A. J. xvii. 182 |
| Ditto, ditto | Two altars, carved figure, pillar. Found 1787 | A. ix. 220, x. 138; J. i. 325 |
| Ditto, Sewell's Lane | Two præfericula or vases of bronze, now in British Museum. Found in 1804 | G. M. L. Romano-British i. 27; J. i. 326 |
| Ditto, Spring Gardens, Bowling Green; Lowther Street | Inscribed sepulchral slab, found 1885 | A. J. xliii. 282; A. Æ. n.s xi. 127; Proc. S. A. N. ii. 25; Proc. S. A. n. s. x. 273; C. and W. viii. 317 |
| Ditto, Victoria Place | Mortarium: amphora, perfect | Arch. Mus. 10, personal information |
| Ditto, West Walls | Fibula | A. Æ. o. s. i. Catalogue 5 |
| Ditto, in or near | Gold rings, one with cornelian intaglio, other with an onyx | Arch. Mus. 8 |
| Ditto, in or near | Massive penannular ring, copper-gilt | Arch. Mus. 11 |
| Ditto, ditto | Pottery, objects of metal, rings, fibulæ, bronze needle, lamp, Samian ware, urns, querns; found in sewage works 1855, also horse shoes, coins and anvils | Arch. Mus. 7; Proc. S. A. n. s. iv. 47 |
| Ditto, ditto | Gems | L. clxxxvii.; Hou. 435; Leland, Itin. vii. part i. 70 |
| Ditto, ditto | Pottery, with potter's marks | A. Æ. n. s. xiii. 198; Proc. S. A. N. iii. 250 |
| Ditto, ditto | Pottery, with *graffiti* inscription | A. J. xxxix. 367 |
| Ditto, ditto | Seal box-lid with phallic emblem | Proc. S. A. n. s. vii. 262 |
| Ditto, Tullie House | Fibula and medal of Trajan. Found 1743 | J i. 329; H. ii. 651 |
| Ditto, ditto | Boar's head in stone, pottery, double row of stockades, forty feet apart with platform of oak between; bronze bowl | Proc. S. A. n. s. xiv. 37; C. and W. xii. 344 |
| Ditto | Triclinium, with inscription MARTI VICTORIÆ | William of Malmesbury; Camden; J. i. 328; H. ii. 650 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Roman—*cont.* | |
| Carlisle, Aglionby's House | Inscribed stone | H. ii. 650 |
| Ditto, Middleton's House | Inscribed stone | H. ii. 650 |
| Ditto, English Street, opposite Bush Hotel | Large brass horse ornament | H. ii. 651 |
| Carlisle, Old, near Wigton, 29. S.W. | Station, inscribed altars and stones, miscellaneous antiquities, roads | H. ii. 400-10; N. and B. ii. 144-47; L. cxlii.-iii.; clxxxv.-vi; W. 267; Hou. 448; Br. and Br. 196-99; Hut. 230-36; G. M. L. Romano-British, i. 29-32; A. Æ. o.s. i. App. 5 and Catalogue 4; H. N. 234; I. B. 54; B. R. i. 112, ii. 276; Proc. S. A. N. ii. 158; L. S. 417-28; B. A. A. iii. 42; C. and W. iii. 64; Corp. 80-3, 212 |
| Castlesteads or Cambeck Fort, Walton, 17. N.E. | The Great Barrier of Hadrian, camp, inscribed altars and stones, miscellaneous antiquities | H. i. 102-119; N. and B. ii. 483-5; L. cxxxviii.-ix., clxxxv., clxxxvii; W. 694-5; Br. and Br. 126-7; G. M. L. Romano-British, i. 34-5; D. S. 62-3; H. N. 211; C. A. iv. 148, etc.; B. R. i. 107; ii. 258-61; I. S. 96; A. xi. 63-71; A. Æ. o.s. ii. 80; C. and W. i. 204; L. S. 211-38; Corp. 151-8; F. 91 |
| Ditto, ditto, 17. N.E. | Gems | L. S. No. 477; C. and W. iv. 526; Arch. Mus. 8 |
| Causeway House, 31. N.W. | Road | C. and W. iii. 77 |
| Cleator Road, 67. S.E. | Road | C. and W. iii. 339-40; W. 374; J. iii. 35, 51 |
| Coachgate or Couchgate, 49. S.W. | Road | L. cxxxvi.; C. and W. iii. 79 |
| Cockermouth, 54. N.E. | Altar, pottery, roads | L. cxxxvii., clviii., clxxxi.; J. iii. 35; C. and W. iii. 343, iv. 135; A. Æ. n.s. vii. 80-1; Corp. 90 |
| Cold Fell 72 N.W. & S.W. | Camp ? | C. and W. iii. 337, 340 |
| Coome Crag, 12. S.E. | Written rock | L. clxxviii.; W. 689; A. J. xiii. 404; L. S. 203-4; Corp. 141, 150 |
| Corby Castle, 24. N.W. | Altar | I. S. 96; W. 194 |
| Cowclose, 49. N.E. | Road | L. cxxxvii.; C. and W. iii. 79 |
| Crosby-on-Eden, 17. N.W. | The Great Barrier of Hadrian | H. ii. 576; W. 157-8 |
| Ditto (High) 17. S.W. | Road | L. cxxxiv. |
| Cross Canonby Churchyard, 35. S.W. | Inscribed altar, road | L. cxxxvi.; C. and W. iv. 323-4; A. J. xxxvi. 154; H. i. 262-3, 297, 302 |
| Crowdundle Beck, 60. N.W. | Written rock | Hw. 97; L.S. 750 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Roman—*cont.* | |
| Cunninggarth, near Wigton, 29. S.W. | Inscribed and carved stones (one a copy of the Hermes of Praxiteles ?) | G. M. L. Romano-British, i. 32; Proc. S. A. N. iii. 232, 250; C. and W. x. 283. Proc. S. A. n.s. xiii. 348 |
| | POST-ROMAN. | |
| Carlisle, Annetwell Street | Stockading | B. A. A. xxxiii. 526 xxxiv. 260; C. and W. iii. 134; iv. 91 |
| Ditto (Castle) | Brooch with Anglo-Saxon inscription | A. Æ. o. s. i. Catalogue, 5 |
| Ditto (Cathedral) | Runic inscription | A. Æ. n. s. iii. 65-8 |
| | EARTHWORKS. | |
| Dacre, Studford Brow, 58. S.E. | Mound and bones | W. 531 |
| Dalston, 23. S.W. | Earthworks known as "The Bishop's Dyke' | H. ii. 448; W. 161; C. and W. vii. 271 |
| Dalston Hall, near, 23. S.W. | Tumuli, so marked on Ordnance Map, but proved to be natural | C. and W. ix. 117 |
| Dean, 62. N.W. | Parallel trenches | C. and W. iii. 345 |
| Ditto, Parkhill, 62. N.W. | Tumuli (2, archery butts?) | H. ii. 104 |
| Dovenby Hall, near, 45. S.E. | Three oval-shaped earthworks | W. 287 |
| Dunmallet, or Dunmallard Ullswater, 66. N.W. | Hillfort | W. 779; Hou. 252; C. and W. i. 158; West, 150 |
| Dunmailraise, 76. N.W. | Cairn of stones | H. ii. 222-3. Proc. S. A. n.s. xiii. 218; Hou. 329-30; Hut. 181; A. ix. 225 |
| Dunwalloght Castle, 32. N.W. | Earthworks, *see* Cumrew | |
| Dyke, the Bishop's, *see* Crosby-on-Eden and Dalston | | |
| | PRE-ROMAN. | |
| Dacre, Fluskew Pike, Silver Field, 58. N.W. | Stone coffins, urns, bones | H. i. 477; W. 529; Br. and Br. 163; J. ii. 200; G. M. L. Romano-British, i. 36-7; Arch. Mus. 15 |
| Ditto, Yamonside, Fluskew Hill, 58. S.W. | Megalithic remains, stone circles | C. and W. i. 167 |
| Dalston, Chapel Flat, opp. to Bracken How, 30 N.W. | Megalithic remains, stone circle, barrow, cist | H. ii. 452; N. and B. ii. 323; W. 161: Br. and B. 184 |
| Ditto, The Toddlehill, 30 N.W. | Tumulus, urns, ashes, bones | H. ii. 444 |
| Dean Moor, 62 S.W. | Stone Circle. *See* Studfold Gate. | W. 162 |
| Dearham, 45 N.W. and S.W. | Stone implement, unpolished celt | Proc. S. A. n. s. viii. 492 |
| Devoke Water, 83 N.W. | Cairns, tumuli | C. and W. iii. 251 |
| Distington, 61. N.E. and S.E. | Stone hammer, spear-head | Proc. S. A. n. s. viii. 491 |
| Drigg, 82 N.W. | Stone axe | Proc. S. A. n. s. viii. 491 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | ROMAN. | |
| Dearham, 45 N.W. | Inscribed stone. Found 1884 | A. J. xlii. 145 |
| Denton, Over, 12. S.E. | Inscribed altars and stones | Proc. S. A. n. s. ix. 60; A. J. xxxix. 358, xli. 180; Corp. 141-4 |
| Denton, Nether, 12. S.E. | Camp, pottery, coins, miscellaneous antiquities. Found 1867 | Proc. S. A. n. s. iv. 45; C. and W. i. 88 |
| Dovenby Hall, near, 45 S.E. | Road | L. cxxxvi.; W. 287-8 |
| Drawdikes Castle, *see* Stanwix Drawdikes | | |
| Drumburgh, 15 S.W. | The Great Barrier of Hadrian, camp, inscribed stones and altars, miscellaneous antiquities | H. ii. 486-8; N. and B. ii. 214; W. 151; L. cxl. Br. and Br. 191; Hut. 249; D. S. 85; Proc. S. A. N. ii. 239; B. R. i. 109, 157, ii. 266; I. S. 98; C. and W. i. 209 |
| Ditto | The Great Barrier of Hadrian, camp, inscribed stones and altars, miscellaneous antiquities | H. N. 223; L. S. 264-266; Corp. 164; F. 83 |
| Ditto | Inscribed stone. Found 1859 | Arch. Mus. 9 |
| Duddon Sands, 88 and 90 | Road | C. and W. iii. 71 |
| Dunmallet, or Dunmallard, Ulleswater, 66. N.W. | Fort (?) and road | C. and W. iii. 79 |
| Dykesfield, *see* Burgh upon Sands | | West's Guide to the Lakes, 150 |
| | POST-ROMAN. | |
| Denton Hall, 18. N.E. | Moated mount and base court | C. and W. vi. 195 |
| Denton, Over, 12. S.E. | British village | D. S. 56 |
| Dacre, Fluskew Pike, or Newbiggen Moor Silver Field, 58. N.W. | Silver fibula with triquetra ornaments. Found 1785. *Also* silver rings | H. i. 477; W. 529; Br. and Br. 163; J. ii. 200; Arch. Mus. 15; G. M. L. Romano-British, i. 36-37; G. M. 1785, 347; A. J. vi. 70; Clarke's Survey of the Lakes |
| | EARTHWORKS. | |
| Eamont, opposite to Mayburgh, 58. N.E. | Tumulus | Hut. 97-8 |
| Easby, Great, 18. N.W. | Camp | O. S. |
| Ennerdale Water, 68. S.E. | Cairns | C. and W. iii. 248 |
| Ewanrigg, near Dearham, 45. S.W. | Site of castle | H. ii. 263 |
| | PRE-ROMAN. | |
| Eaglesfield, near, 54. S.E. | Unpolished stone celts | C. and W. iii. 344 |
| Edenhall, Oxhouse Oaks, 50. S.W. | Stone and bronze hatchets | J. ii. 424; W. 538 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Pre-Roman—*cont.* | |
| Edmond Castle Lodge, 17. S.E. | Cist, skeleton, urns | C. and W. vi. 470 |
| Egremont Common, 72. N.E. | Tumuli and megalithic remains | H. ii. 25; Hut. 219; J. iii. 21 |
| Ehenside [Gibb] Tarn, 72. S.E. | Stone and wooden implements, bones, earthenware | A. xliv. 273 |
| Elfa Hills, Hutton, 39. S.W. or 49 N.W. | Trenches, bones, urns | H. i. 512; W. 565; J. ii. 438 |
| Ellenborough, 44. N.E. | Tumulus | N. and B. ii. 112; Br. and Br. 206; A. ii. 54 |
| Elva Plain, 55. N.W. | Stone circle | C. and W. xi. 246 |
| Eskdale, 83. S.W. | Megalithic remains, stone circle, *see* Burnmore | B. A. A. xxxiv. 35; C. and W. v. 55; x. 271 |
| Ditto | Bronze spear-head | B. A. A. ix. 79 |
| | ROMAN. | |
| Eaglesfield, 54. S.E. | Road, ring of fine twisted gold | H. ii. 106; L. cxxxvii.; W. 297; C. and W. iii. 343 |
| Egremont, 72. N.E. | Camp, roads | C. and W. iii. 72, 79, 337-39, iv.; F. 66 |
| Ellenborough [Maryport], 45. N.W. | Camp, inscribed stones and altars, miscellaneous remains, roads, cemetery | H. ii. 269-84; N. and B. ii. 109-12; L. cxli.-ii. clxxxvi.; W. 325; Hou. 453; Br. and Br. 202-5; I. B. 49; I. S. 98-100; A. ii. 58; x. 140-42; Proc. S. A. n. s. iv. 495; B. R. i. 109, 112, ii. 279; A. Æ. n.s. v. 139, vii. 184-95; A. J. xxxvii. 320, 341-3, xxxviii. 278; C. and W. i. 175, v. 237; H. N. 238; L. S. 429-452; Corp. 84-90; F. 68-9 |
| Ditto | Altar, now at Whitehaven. Found prior to 1559 | J. iii. 368 |
| Ditto | Inscribed and sculptured stones, the serpent stone, interments, urns, pottery, glass, pavements. Found 1880 | Proc. S. A. n. s. viii. 393; A. J. xxxvii. 320, 341-3, xxxviii. 278; C. and W. v. 237 |
| Ditto | Painter's palette | B. A. A. xxxvii. 81 |
| Ditto | Antiquities from, exhibited | Arch. Mus. 11 |
| Ditto | Road to Papcastle | C. and W. i. 169 |
| Ditto, Netherhall, 45. N.W. | Small camp | W. 325 |
| Ditto ditto 45. N.W. | Road | O. S. |
| Embleton, 55. N.W. | Enamelled sword, *see* Wythrop Mill | A. J. xiv. 92; C. A. iv. 153; C. and W. i. 221, iii. 340 |
| Ennerdale, 68. | Road | |
| | POST ROMAN. | |
| Egremont Castle, 72. N.E. | Earthworks, older than the Norman Castle | H. ii. 19-20; L. clxvii. Hut. 214-5; J. iii. 33; Br. and Br. 225 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | EARTHWORKS. | |
| Friars' Moor, 73. N.W. | Tumulus, with ditch | C. and W. iii. 248 |
| | PRE-ROMAN. | |
| Farlam, Kirkhouse, 18. S.W. | Cists and urns | W. 676; W. 151; D. S. 85 |
| Fisher's Cross, Port Carlisle, 15. N.W. | Tumulus | |
| Fluskew Common, *see* Dacre | | |
| | ROMAN. | |
| Fairbank, 49. N.E. | Road | L. cxxxvii.; C. and W. iii. 79 |
| Flimby, Risehow, 44. S.E. | Foundations | C. and W. v. 124; A. J. xxxvii. 344 |
| Foldsteads, *see* Kirkbampton, 22. N.E. | | |
| Frisington Park, 68. N.W. | Road | L. cxxxvii.; J. iii. 35; C. and W. iii. 339 |
| | EARTHWORKS. | |
| Geltsdale, The Gairs Terraces, The Green Terraces, Talkin Head Wood, 25. N.E. and N.W. | Artificial terraces | C. and W. vi. 457-61 |
| Geltsdale Middle, 18 S.W. | Tumuli | C. and W. vi. 480 |
| Geltsdale, Cold Fell, 25. N.E. | Tumulus | O. S. |
| Gillalees Beacon, The Park, 8. S.W. | Twin barrows | A. J. xi. 11 |
| Ditto, Tower Brow, 8. S.W. | Tumulus and cairn | A. J. xi. 14, 18 |
| Gillerthwaite, 69. S.W. | Cairns and enclosures | C. and W. iii. 248 |
| Grassmoor, 63 S.W. | Cairn (?) | C. and W. iii. 247 |
| Graystock, Woundel Cairn, 57. S.E. and 65. N.E. | Cairns | H. i. 413; W. 550 |
| Ditto, Berrier Hill, 57. N.E. | Camp, rectangular | O. S. |
| Ditto, Wallawaygreen, 57 S.E. | Fort | O. S. |
| | PRE-ROMAN. | |
| Garlands, near Carlisle, 23. S.W. | Cinerary urns, food vessels, incense vessels, stone implements, flint arrow-head. Now in Carlisle Museum | Personal knowledge |
| Gelt Bridge, Castle Carrock, 25. N.W. | Cairn, cistvaen, skeleton. Opened 1775 | C. and W. vi. 470; W. 671; H. i. 180 |
| Ditto, Leafy Hill, 25. N.W. | Stone cist, skeleton, urns | C. and W. vi. 471 |
| Ditto, near Leafy Hill, 25. N.W. | Cairn, interment, flint knife. Opened 1865 | C. and W. vi. 473 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Pre-Roman—*cont.* | |
| Geltsdale, near Written Rock, 18. S.W. | Bronze celt | C. and W. vi. 474 |
| Gillalees Beacon, Tower Brow, 8. S.W. | Pit dwellings | A. J. xi. 16 |
| Gosforth, 78. | Stone axe, copper battle axe | J. iii. 295 |
| Grey Yauds, *see* Cumwhitten | | |
| Grinsdale, Commons, 23. N.W. | Stone hammer | D. S. 79; Proc. S. A. n. s. viii. 493 |
| | ROMAN. | |
| Gaitscale, 80. S.W. | Road | C. and W. iii. 338 |
| Gelt Valley, 18. S.W. | Written rock No. 1 | H. i. 138-42; N. and B. ii. 495; L. cxxxiii., clviii., clxxx.; W. 649; Br. and Br. 130; Hut. 263-5; I. B. 58; B. R. ii. 267; H. N. 298; L. S. No. 469; Corp. 158 |
| Ditto, Pigeon Clint Rock, 18. S.W. | Written rock No. 2 | H. i. 138-42; L. S. No. 470; Corp. 158 |
| Gilsland Station, 13. S.W. | Centurial stones, three. Found 1884 | A. J. xlii. 144 |
| Glasson, 15. S.W. | The Great Barrier of Hadrian | W. 152; L. S. No. 529; Corp. 164 |
| Gowbarrow Park, 65. S.E. | Road | L. cxxxvi.; W. 549; C. and W. iii. 79 |
| Graystock, 57. S.E. and 65. N.E. | Road from Redstone Camp between the Mell Fells to Ambleside | H. i. 412; W. 549, 552; Br. and Br. 164; J. ii. 387; L. cxxxvi.; C. and W. iii. 78, 243 |
| Ditto, Mell Fells, 57. S.E. | Smelting hearth | W. 550; Br. and Br. 164; J. ii. 386 |
| Grinsdale, 16. S.W. | The Great Barrier of Hadrian | H. ii. 518 |
| | Quarry used by the Romans | W. 168 |
| Ditto, Common, 23. N.W. | Two square camps with mounds before each of their four entrances | D. S. 79; H. N. 300 *n.* |
| | EARTHWORKS. | |
| Hackmoor Hills, 59. N.W. | Cistvaen | O. S. |
| Hallbank Gate, 18. S.E. | Tumulus | C. and W. vi. 480 |
| Hallsteads, 48. S.E. | Camp | O. S. |
| Haresceugh Castle, Penwick, 40. N.E. | Earthworks | O. S. |
| Harras, 12. S.E. | Camp | D. S. 53 |
| Ditto | Long barrow | Personal knowledge |
| Hartside, Benty Hill, 41. N.E. | Tumulus, Old Anthony's Chair | O. S. |
| Hayton, Brampton, 17. S.E. | A mound, 12 feet high, 100 feet diameter at top, circular entrenchment | H. i. 150; W. 677; Clark's Military Architecture, i. 357; C. and W. vi. 466 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Earthworks—*cont.* | |
| Hayton, Brampton, Netherton, 18. S.W. | Tumulus (destroyed), three gold torques found *circa* 1790 | H. i. 151 |
| Hesket-in-the-Forest, 31. S.W. | Four small tumuli | H. i. 505 |
| Hindscarth, 69. N.E. | Large cairn | C. and W. iii. 248 |
| Holm Cultram Abbey, 28. N.W. | Mound and ditch | W. 231 |
| How Mill, 24. N.E. | Great tumulus (? natural) | C. and W. vi. 470 |
| Hutton Common, Collinson's Castle, 39. S.W. | Square fortification of 100 yards each side, mill stones | H. i. 512; W. 565; J. ii. 43 |
| | PRE-ROMAN. | |
| Hallguard Farm, Birdoswald, 12. S.E. | Perforated stone hammer | A. S. I. 200 |
| Hesket Newmarket, Gillfoot, 38. S.W. | Barrow, burnt bones, stone implements, pieces of flint, stone beads | W. 225 |
| Holm Cultram, Highlaws, and Southerfield, 28. N.W. | Stone implements, celts | Arch. Mus. 5 |
| Holm Cultram, Southerfield, 28. S.W. | Bronze spear-head | Arch. Mus. 6 |
| | ROMAN. | |
| Hale, 72. S.E. | Road, inscribed stone. Found 1883 | A. J. xli. 179; C. and W. iii. 340, vii. 150 |
| Halsteads near Mable Cross, 48. S.E. | Camp | C. and W. iii. 243, 246 |
| Hardknott Castle on Hardknott Fell, 79. S.E. | Camp, roads, parade ground, miscellaneous antiquities excavated in 1892 | H. i. 569-70; L. cxlviii.; W. 411-12; Br. and Br. 235-6; Hou. 471; J. iii. 184; C. and W. i. 71, iii. 79, 243, 250, 251, 337, 338, viii. 68, xi. 67, xii. 375; Corp. 77, 80; F. 60, 63 |
| Ditto, 79. S.E. | Inscribed stone | Proc. S. A. o. s. iii. 225; n.s. xiv. 42; Corp. 77, 80 |
| Harehill near Lanercost, 12. S.E. | The Great Barrier of Hadrian | L. cxxxiii. |
| Harrington, 61 N. | Inscribed altar. Found 1885 | A. J. xliii. 288; A. Æ. n. s. xii. 287; C. and W. ix. 294 |
| Hartside, 41. N.E. | Road | C. and W. iii. 70 |
| Hesket-in-the-Forest, 31. S.W. | Inscribed stone | Corp. 212 |
| Hesket Newmarket, 38. S.W. | Road | W. 221 |
| High Crosby, *see* Crosby-on-Eden | | |
| Highhouse, 12. S.E. | Road, castellum | L. cxxxiv. |
| Highwall Town, 11. S.E. | The Great Barrier of Hadrian, Mile Castle | H. i. 74, 75 |
| Holm Cultram, 28. N.W. | Road | W. 238; C. and W. iii. 72, 77 |
| Hotchberry, *see* Brigham. | | |
| Housestead near Watchcross, Irthington, 17. S.W. | Blank altar | H. i. 122 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Roman—*cont.* | |
| Howgill, Walton, 12. S.W. | Inscribed stones and altar | L. clviii. clxix. clxxxii.; L. S. No. 409; Corp. 141, 143 |
| Hutton Moor, 49. N. | Road | C. and W. iii. 78 |
| | POST-ROMAN. | |
| Headswood nigh Newtown of Irthington, 17. N.E. | Mound and base court | D. S. 70 |
| Hesket Lane near The Court Thorn, 31. S.W. | Tumulus, opened 1822. Sword, spears, axes, bridle, pommel of a saddle, ivory comb [Anglo-Saxon] | G. M. L. Archaeology, ii. 174-75<br>A. Æ. o. s. ii. 106<br>Arch. Mus. 13 |
| | EARTHWORKS. | |
| Ireby, Overwater, 47. S.W. | Large camp or enclosure | C. and W. iii. 243, 245, vi. 511 |
| Ireby, Thistlebottom, 37. S.E. | Square camp | O. S. |
| Isell, The Grey Barrow, between Blindcrake and Redmain, 46. S.W. | Tumuli | W. 362 |
| | PRE-ROMAN. | |
| Ireby, S.W. | Stone hammer, thumb and finger stone | Proc. S. A. n. s. viii. 493 |
| Irton, 78. and 79. | Flint spear-head, polished stone axe | Proc. S. A. n. s. viii. 491 |
| Irton Fell, 78. and 79. | Stone implement, unpolished celt | Proc. S. A. n. s. viii. 492 |
| Irving River, between Naworth and Lanercost, 12. S.W. | Bronze socketted celt. Found 1877 | Personal information |
| Irthington, 17. N.E. | Flint spear-head | A. S. I. 316 |
| Ditto | Bronze palstave of adze form | A. B. I. 85 |
| | ROMAN. | |
| Ireby [Irby], 37. S.W. | Square camp | L. cxlviii.; W. 244; Hou. 448 |
| Irthington, 17. N.E. | The Great Barrier of Hadrian, camp at the Nook ? altars, coins, seal, pottery | W. 679; Corp. 151 |
| Ditto, Buckjumping, Redhill, Newtown of Irthington, and Whiteflat, 17. N.E. | Road, cuttings through hills | D. S. 70; L. S. Nos. 455-64; F. 90 |
| Irthing River, 12. S.E. | Inscribed rock, (?) same as Coombe Crag | L. cxxxiii. cxxxiv. clvii. clxxviii. |
| Ivegill, near, 38. N.E. | Camp, coins, one of gold | W. 166 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | POST ROMAN. | |
| Irthington, the Nook, 17. N.E. | Moated mound and earthworks | D. S. 67-9 |
| Ditto, the Mill, 17. N.E. | Moated mound | D. S. 70 |
| | EARTHWORKS. | |
| Keswick, Castle Crag, Shoulthwaite, 64. S.E. | Fortified hill | H. ii. 154; C. and W. iii. 247 |
| Ditto, Borrowdale Castle Crag, 70. N.W. | Fortified hill, leaden vessels, iron pot, etc. | H. ii. 154, 164, 176 |
| Keswick, Castle How, 55. N.E. | Fortified hill (see Bassenthwaite Lake) | H. ii. 154 |
| Ditto, Castlet, 64. N.W. | Fortified hill | H. ii. 154 |
| Ditto, Falcon Crag, 64. S.W. | Cairns | C. and W. iii. 247 |
| Ditto, Latrig and Skiddaw, 56-64 | Tumuli | H. ii. 155 |
| Ditto, Ree Castle, 70. N.W. | Fortified hill | H. ii. 154 |
| Kirkland, 51. S.W. | Terraces, known as "hanging-walls of Mark Antony" | H. i. 258; C. and W. viii. 40; J. ii. 450 |
| Kirklinton Hall, near, 11. N.W. | Earthworks, moat | O. S. |
| Knight's Hill, Southernby, Castle Sowerby, 38. S.W. | Foundations | H. ii. 433 |
| | PRE-ROMAN. | |
| Keswick, Burns Moor, 64. N.E. | Perforated hammer head of granite | A. S. I. 201 |
| Keswick, Castle Rigg Stone Circle, 64. N.E. | Megalithic remains, stone circle, stone implements | H. ii. 191-3; N. and B. ii. 80; L. cxxviii.; Br. and Br. 238-9; Hou. 265; Hut. 159-61; G. M. L. Archæology, ii. 23; I. B. 48; Proc. S. A. o. s. iii. 225, n. s. xii. 91-2 |
| Ditto | Megalithic remains, stone circle, stone implements | B. A. A. xxxiv. 23; C. and W. i. 218, iii. 247, v. 50, x. 271 |
| Ditto, 64. N.E. | A second stone circle, now gone | Proc. S. A. o. s. iii. 225; I. B. 48 |
| Ditto, 64 | Bronze palstave with ribs | A. B. I. 93 |
| Ditto, 64 | Celt of greenstone | A. S. I. 87 |
| Ditto, 64 | Large celt | A. S. I. 107; Proc. S. A. n. s. iii. 225 |
| Ditto, 64 | Stone celts (9), perforated implements (6) | Proc. S. A. n. s. viii. 491 |
| Kidburngill, 62. S.W. | Stone hammer | Proc. S. A. n.s. viii. 491 |
| Kirkandrews - on Eden, the Common, 23. N.W. | Three circular enclosures and urns | H. ii. 521-2; W. 170 |
| Kirkbeck River, Bewcastle, 8. N. | Stone implement | A. J. xi. 8 |
| Kirkbride Church, 21. N.E. | British pottery | W. 248 |
| Kirkoswald, 41. S.E. | Perforated stone axe | A. S. I. 178 |
| Ditto, The Castle, 41. S.E. | Stone hammer | A. Æ. o. s. i. catalogue 3 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Pre-Roman—*cont.* | |
| Kirkoswald Old Park, 40. S E. | Large cairn of stones, incense vessel, remains of stone cist | and W. xii. 275 |
| Kirksanton, near Millom, the Standing Stones, 88. S.W. | Megalithic remains, tumulus | H. i. 530; W. 408; C. and W. i. 278; J. iii. 180 |
| Knock's Cross, Port Carlisle, 14. N.E. | Tumulus | W. 151; D. S. 85 |
| | ROMAN. | |
| Kellbarrow, 49. S.W. | Road | L. cxxxvi.; G. and W. iii. 79 |
| Keswick, 64. N.W. | Station and roads, millstones, lachrymatory, pavements, inscribed stone | H. ii. 155, 176, 179; L. clx.-clxxxiv.; Proc. S. A. o. s. iii. 225; C. A. iv. 152, etc.; C. and W. iii. 78, 169, 189; iv. 328; West's Guide to the Lakes |
| Ditto, Castle Crag, Borrowdale, 70. N.W. | Fort, or outpost, quern, coin, stones for *balista* | Proc. S. A. o. s. iii. 225 |
| Ditto, Castle Rigg Fell, 64. S.E. | Pottery | C. and W. i. 220 |
| King's Stables, *see* Poltross Burn | | |
| Kirkandrews-upon-Eden, 16. S.W. | The Great Barrier of Hadrian. Mile Castle, coins (large number of denarii) sculptured stones, altar | H. ii. 520; W. 170-171; L. clviii. clxxxi.; D. S. 79 |
| Kirkandrews-upon-Eden, Kirksteads, near Cobble Hall 23. N.W. | Station, pottery, glass, bricks, masonry, carved stones, altar, coins, miscellaneous antiquities | C. and W. i. 148-49; iv. 323; W. 171; Proc. S. A. N. ii. 237; L. S. No. 508; Corp. 162-63; F. 86 |
| Ditto, near Kirksteads, 23. N.W. | Coins (1,100 denarii, principally Constantine and Diocletian) | W. 170 |
| Kirkbampton Church, 22. N.E. | Inscribed stone | W. 173; L. S. No. 517; Corp. 162-63 |
| Ditto, Foldsteads, 22. N.E. | Enclosures, double ditches and rampart, altar, inscribed stone | W. 173; B. A. A. vi. 149; L. S. No. 518; C. and W. iii. 77; Corp. 162-63 |
| Kirkbride Church, 21. N.E. | Camp and road, inscribed altar, pottery | W. 248; C. and W. iii. 77; L. S. No. 530; Corp. 77 |
| Kirkland, Leath Ward, 51. S.W. | Road, Maiden Way, square camp in Bank Wood | H. i. 258; J. ii. 450; C. and W. iii. 70; L. cxxxv. cxlviii. |
| Kirkland, Solway Firth, 15. N.W. | The Great Barrier of Hadrian | L. cxxxiii.; D. S. 86 |
| Kirklinton Church, 11. N.W. | Roman stones | W. 684 |
| | POST-ROMAN. | |
| King Moor, 16. S.E. | Gold ring with runes | A. Æ. o. s. i. 136; Arch. Mus 14 |
| Kirkbride Church, 21. N.E. | Anglo-Saxon beads and ornaments | W. 248 |
| Kirkoswald, 40. S.E. | Triangular ornaments of silver, enriched with red paste: also 700 stycas | J. ii. 296; L. ccviii. |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | EARTHWORKS. | |
| Lanercost Bridge, 18. N.W. | Tumulus (? if not natural) | O. S. |
| Lazonby Fell, 39. S.E. | Camp and fort | O. S. |
| Ditto, ditto, Castlerigg, 39. N.E. | Fort, cairns | H. i. 289 |
| | PRE-ROMAN. | |
| Lacra, 88. S.W. | Megalithic remains | C. and W. i. 278 |
| Lamplugh, Stockhow Hall estate, 68. N.W. | Stone circle, standing stones | J. iii. 83 |
| Ditto, Gatra, 62. S.W. | Circular enclosure | C. and W. iii. 346 |
| Ditto, Woodmoor, 62. S.W. | Stone hammer | C. and W. iii. 346 |
| Latterbarrow, 83, N.W. | Long barrows | C. and W. xii. 180 |
| Lazonby Fell, 39. S.E. | Grooved rock for sharpening celts | A. S. I. 236; C. and W. vi. 495 |
| Longtown, 10. N. | Bronze flanged celt | A. B. I. 73 |
| Lowes Water, 62. S.E. | Stone hammer | Proc. S.A. n. s. viii. 491 |
| | ROMAN. | |
| Lamplugh, 62. S.W. | Road | L. cxxxvii.; W. 399; J. iii. 35, 84; C. and W. iii. 340, 345 |
| Lanercost, parish of, 12. S.E. & W. | The Great Barrier of Hadrian, camp | D. S. 58-59 *n.*; C. and W. i. 40-47 |
| Lanercost Abbey, 12. S.W. | Inscribed stone in the headway of the clerestory passage at the south-east of the transept. Found 1744 | G. M. 1744, 369; G. M. L. Romano-British, i. 33; H. i. 62; L. cli.; H. N. 208; W. 687; A. Æ. n. s. iii. 39; A. J. xv. 158; L. S. No. 361; Corp. 141, 214; F. 91 |
| Lanercost Abbey Crypt, 12. S.W. | Inscribed altar | C. and W. i. 44; W. 687; A. J. xv. 159; L. S. No. 365 |
| Lanercost Bridge, near 18. N.W. | Pier of bridge | Personal observation. |
| Lanerton, 12. S.E. | Inscribed stones | B. R. ii. 258; Corp. 141 |
| Lazonby Church, 40, S.W. | Roads. Roman monuments from Plumpton used as "thorough stones" | H. i. 289; W. 575; Bishop Nicolson's Visitation 113; Proc. S. A. n.s. xiii. 265 |
| Lenge Crag, Naworth, 18. N.W. | Written rock | H. i. 141, 297; Hut. 256; B. R. ii. 269 |
| Linstock, 17. S.W. | Station (?) | C. and W. i. 86 |
| Long Streight, query in Borrowdale, 70. S.W. | Bloomery | Proc. S. A. o. s. iii. 225 |
| Longtown, 10. N. | Road | L. cxxxv. |
| Lowca Brow, 61. S.E. | Ditto | C. and W. iii. 340 |
| Low Street, 49. N.E. | Ditto | L. cxxxvii.; C. andW. iii. 79 |
| Low Wall, *see* Howgill | | |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | POST-ROMAN. | |
| Lazonby, Castlerigg, 39. N.E. | Moated mound, foundations | H. i. 289 |
| Liddell Moat or Strength, 6. N.E. | Moated mound | H. ii. 529; N. and B. ii. 471; W. 682; Br. and Br. 112; C. and W. ix. 404; Roy, plate xxiii. |
| | EARTHWORKS. | |
| Maiden Castle [Caer Thanock], foot of Ullswater, *see* also Soulby Fell, 66. N.W. | Hill Fort | Hut. 81-82<br>C. and W. ii 248 |
| | PRE-ROMAN. | |
| Maryport, 45. N.W. | Cup-marked stone | C. and W. ix. 435 |
| Maughanby, *see* Addingham, 2nd stone circle | | |
| Melmerby, 50. N.E. | Hammer stone | A. S. I. 215 |
| Melmerby High Scar, 41. S.W. & 51. N.W. | Enclosures | C. and W. vi. 488 |
| Moresby Hall, 61. S.W. | Stone cists and skeletons | W. 420 |
| Millom, Sunkenkirk, stone circle, 86. S.W. | Megalithic remains, stone circle | G. M. L. Archæology, ii. 23 |
| Millom, Lowscales, 88. S.W. | Battle-axe, 13½ inches long | J. iii. 148 |
| Ditto, 88. S.W. | Neolithic implements | Personal knowledge, H. S. C. |
| Motherby, 58. N.W. | Megalithic remains, stone circle blasted away by steward of Duke of Norfolk | H. i. 413; J. ii. 386; Br. and Br. 164; Proc. S. A. o. s. iii. 225 |
| Mowbray, 27. N.E. | Stone hammers, polished celts, stone adze | Proc. S. A. n. s. viii. 493 |
| | ROMAN. | |
| Maryport, *see* Ellenborough | | |
| *Maiden Way, The* | Road | A. Æ. o. s. iv. 36; A. J. xi. 1, 124, 217, 345. Also other authorities, *passim* |
| Mawbray, or Mawburgh, 27. N.E. | Camp, inscribed stones, road | H. ii. 346; L. cxxxvi., cxlvii. W. 236, 238, 422; Proc. S. A. n. s. viii. 206, 395; C. and W. iii. 72, 337, iv. 318, v. 136; Corp. 90; F. 71; L. S. No. 903; A. J. xxxvi. 425, xxxvii. 149, 320, 343 |
| Mell Fells, *see* Graystock | | |
| Melmerby, 41. S.W. | Road (The Maiden Way) | H. i. 220; L. cxxxv.; J. ii. 313; C. and W. iii. 70 |
| Millhouse, Castle Sowerby, 48. N.W. | Road | W. 221 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Roman—*cont.* | |
| Millom, 88. S.E. | Road near | C. and W. iii. 71 |
| Money Holes, near Harehill, 12. S.E. | The Great Barrier of Hadrian, additional entrenchments, coins | D. S. 58 |
| Moresby, 61. S.W. | Camp, inscribed stones, miscellaneous antiquities | H. ii. 90-93; N. and B. ii. 47-48; L. cxxxvii., cxliv., cl.-clxxxiv.; W. 421, 422, 440; Br. and Br. 214-5; Hou. 458; Hut. 222-223; I. B. 52; J. iii. 59, 368; A. Æ. n. s. v. 138; B. R. ii. 285; A. J. xxxvii. 341; L. S. 458-460; Corp. 83-84; F. 67 |
| Ditto. | Inscribed altar and a bust in stone | Proc. S. A. n. s. ix. 62<br>A. J. xxxix. 357 |
| Mowbray, *see* Mawbray, 27. N.E. | | |
| Muncaster, near Carlisle, 31. S.W. | Camp and road | C. and W. iii. 77 |
| Muncaster, near Ravenglass, *see* Walls Castle | | |
| Muncaster Castle, near Ravenglass, on road to The Forge, 83. N.W. | Tile-kilns | C. and W. viii. 67 |
| Murray, $\frac{1}{4}$ mile E. of Birdoswald, 12. S.W. | Inscribed altar | Corp. 141, 148 |
| | POST-ROMAN. | |
| Maryport, South end of Castle Hill, 44. N.E. | Moated mound | Br. and Br. 207 |
| | EARTHWORKS. | |
| Naworth Castle Gate, Tower Tye, 18. N.W. | Circular entrenchment | D. S. 59<br>C. and W. iv. 547 |
| Newton Reigny, 49. S.E. | Camp | O.S. |
| | PRE-ROMAN. | |
| Naworth Castle, 18. N.W. | Bronze spear-head | A. B. I. 334 |
| Netherby, 6. S.E. | Three bronze spear-heads and three bronze palstaves | Arch. Mus. 6 |
| Newtown of Mawbray, 27. N.E. | Polished celts | Proc. S. A. n. s. viii. 493-94 |
| Newton Reigny, 58. N.E. | Tumuli, urns | W. 581 |
| | ROMAN. | |
| Naworth Castle, at or near, 18. N.W. | Inscribed stones, road | H. i. 72, 92, 136, 297; I. B. 58; B. R. bk. ii. ch. iii. Corp. 141 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Roman—*cont.* | |
| Netherby, 6. S.E. | Station, inscribed stones and altars, miscellaneous antiquities | H. ii. 533-40; N. and B. 469-71; L. cxlvi., cl.-clxxxix., clxxxvii.-viii.; W. 628; Br. and Br. 99-106; G. M. L. Romano-British, i. 34; I. B. 57-8; B. R. ii. 271; I. S. 96; A. ix. 222, x. 139; A. J. xxxvii. 342; H. N. 249; L. S. 392-403; Corp. 165-68; F. 75 |
| Ditto | Inscribed altar | A. J. xlvii. 267 |
| Ditto | Silver fibula | L. clxxxvii. |
| Ditto | Antiquities from | Arch. Mus. 10 |
| Nunnery, 40. N.W. | Altar, now in Carlisle Museum | H. i. 186; L. S. No. 793 |
| | EARTHWORKS. | |
| Ormstead Hill, near Eamont Cottage, 58. N.E. | Cairn | H. i. 312 |
| Orton, 22. N.E. and S.E. | Ditch and rampart, enclosing the village | W. 175-76; Br. and Br. 186 |
| Ousby, 50. N.E. | Earthen ramparts, enclosing pentagonal area, an urn, foundations of walls | W. 584; J. ii. 259 |
| Overwater, *see* Ireby | | |
| | PRE-ROMAN. | |
| Ousby, 50 or 51 | Perforated stone axe | A. S. I. 179 |
| | ROMAN. | |
| Old Carlisle, *see* Carlisle, Old | | |
| Old Penrith, *see* Plumpton Wall | | |
| Old Wall, 17. N.E. | Inscribed stones | H. i. 121; Corp. 151, 214; L. clxx.; L. S. Nos. 432, 450, 356, 461, 463; H. N. 299 |
| Orthwaite Hall, 47. S.W. | Camp | W. 260 |
| Orton, 22. N.E. and S.E. | Roads and foundation | H. ii. 516; W. 175-76 |
| Oughterside Moor, 35. S.E. | Road | W. 208; C. and W. iii. 76 |
| Ousby and Ousby Fell, 51. N.W. and S.W. | Road (The Maiden Way) | L. cxxxv.; C. and W. iii. 70 |
| Outerside Common, 35. S.E. | Road | L. cxxxvi. |
| | EARTHWORKS. | |
| Pardshaw Crag, White Causeway, 54. S.E. | Circular enclosure of earth, earthworks | C. and W. iii. 344 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Earthworks—*cont.* | |
| Penrith Common, 49. S.E. and 50. S.W. | Square enclosures, 20 yards each way. Cistvaens | H. i. 321 |
| Plumpton Mill Hill, 49. N.E. | Cairns | H. i. 490 |
| Ponsonby In Fell, 78. N.W. | Camp | H. i. 593; L. cxlvii.; J. iii. 280; C. and W. iii. 250, vii. 82 |
| Pykethwaite Fell, Christenbury Crags, 4. N.E. | Camp | G. M. L. Romano-British, i. 38 |
| | PRE-ROMAN. | |
| Penrith Beacon, 59. N.W. | Polished greenstone celt | A. S. I. 95 |
| Plumpton, Penrith, 39. S.E. or 49. N.E. | Perforated stone axe | A. S. I. 178 |
| | ROMAN. | |
| Papcastle, 54. N.E. | Station, inscribed stone and altars, roads, miscellaneous antiquities | H. ii. 108, 256-8; N. and B. ii. 104; L. cxxxvi., cxxxvii., cxlii., clxxxix.; W. 292-3, 301; Hou. 457: Hut. 228-9; Br. and Br. 210-1; I. B. 51; A. J. xxxvii. 341; C. and W. i. 169, 173, iii. 76, 79, 246, 342, iv. 113, 136; L. S. 455-7; Corp. 84, 90; F. 62 |
| Ditto | Bronze statuette | Proc. S. A. n. s. vii. 263 |
| Ditto | Samian ware, charred wheat | Arch. Mus. 11 |
| Penrith, 58. N.E. | Roads | C. and W. iii. 75 |
| Penrith Castle, 58. N.E. | Station (?), masonry (?) | H. i. 317, 318 |
| Pikehill, near Lanercost, 12. S.E. | The Great Barrier of Hadrian, Mile Castle | C. and W. i. 214 |
| Pikeless Gate, Caldbeck, 37. S.E. | Road | W. 221 |
| Plumbland, Ewe Close, Ward Hill, 46. N.W. | Camp | W. 365 |
| Plumpton Wall, or Old Penrith, 39. S.E. | Station, inscribed altars and stones, miscellaneous antiquities | H. i. 312, 477-90; N. and B. ii. 420-3; L. cxxxv. cxxxvi. cxxxvii.-ix. cxliii.; W. 575, 576, 577; Hut. 107-8; Hou. 445; Br. and Br. 169-70; G. M. L. Romano-British i. 36-37, C. and W. i. 328, iii. 68, 69, xi. 59; Proc. S. A. n. s. xiii. 267; J. ii. 461-5; A. ix. 220; A. J. xii. 227; A. Æ. o. s. i. App. i. 1, ii. 265; B. R. i. 107, 111, ii. 272; West's Guide, 143; L. S. 404-11; Corp. 77-80 |
| Ditto | Gold fibula | L. clxxxviii. |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Roman—*cont.* | |
| Poltross Burn, near Gilsland Railway Station, 13. S.W. | The Great Barrier of Hadrian, Mile Castle, called King Stables, bridge approaches, deep cuttings | H. i. 65; L. cxxxiii.; C. and W. iii. xxiii. xxv. ix. 163; D. S. 50; B. R. i. 152; Proc. S. A. n. s. xi. 209; A. Æ. n. s. xii. 160 |
| Port Carlisle, 15. N.W. | Inscribed altar | W. 151; H. N. 227; L. S. No. 521 |
| | POST-ROMAN. | |
| Peel, 63. S.W. | Moated site | C. and W. iii. 247 |
| | EARTHWORK. | |
| Rose Castle, 30. S.W. | Two square camps | H. ii. 432, 433; N. and B. ii. 323; C. and W. iii. 71 |
| | PRE-ROMAN. | |
| Ravenglass, 82. S.E. | Stone axe | Proc. S. A. n. s. viii. 491 |
| Red Dial, Wigton, 29. S.W. | Perforated stone axe or hammer | A. S. I. 179 |
| Redhills, Penrith, 58. N.E. | Cup-marked stone, interment, burnt bones | C. and W. vi. 110; Proc. S. A. n. s. viii. 535; Proc. S. A. S. n. s. iv. 438 |
| *Roads, Pre-Roman, in Cumberland* | | H., and N. and B. *passim;* L. cxxix.-cxxxvii.; F. 6 |
| | ROMAN. | |
| Ravenglass, *see* Walls Castle | | |
| Redstone Camp, *see* Whitbarrow | | |
| Rickerby Park, 23. N.E. | Interment in oak and lead coffin in stone vault, found Nov. 1873 | Personal knowledge and Carlisle Papers, Nov. 1873 |
| *Roads, Roman, in Cumberland* | | H., and N. and B. *passim;* L. cxxix.-cxxxvii.; W. 3; A. Æ. o. s. iv. 36; F. 26; B. R. bk. iii. ch. ii. |
| Rose Hill, Gilsland, 13. N.W. | Centurial stones | A. Æ. n. s. xi. 121; Proc. S. A. N. ii. 8 |
| | EARTHWORKS. | |
| Salkeld, Great, 40. S.W. | Raise or cairn | H. i. 283; W. 620; Br. and Br. 148 |
| Ditto, Aikton Castle, 40. S.W. | Foundations | W. 620; Br. and Br. 148; J. ii. 271 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Earthworks—*cont.* | |
| Salkeld, Great, The Dyke, 50. N.W. | Earthworks, large entrenchment | H. i. 283; W. 620; J. ii. 271; Br. and Br. 148 |
| Ditto, Wan Fell, 50. N.W. | Tumulus | O.S. |
| Scaleby Castle, 17. N.W. | Three concentric moats | Br. and Br. 113 |
| Seatallan, 74. S.W. | Tumulus | C. and W. iii. 249 |
| Skew Hill Camp on the Eden, opp. Grinsdale, 16. S.W. | Nearly rectangular camp | D. S. 79-80 |
| Snittlegarth, 46. N.E. | Square camp | C. and W. vi. 193, 511 |
| Soulby Fell, Caer Thannock, or Maiden Castle, 66. N.W. | Square fort, 20 paces by 15, with a circular mound 80 paces in diameter. *See* also Maiden Castle | C. and W. i. 159; iii. 79 West. 151 |
| Stainton near Eamont, 58. S.E. | Cistvaen | C. and W. iii. 247 |
| Stockdale Moor, 73. S.E. | Cairns (one called Sampson's Bratful) and enclosures | C. and W. iii. 249 |
| Stockelwath in Castle Sowerby, Castle Steads, 30. S.E. | Camp | H. ii. 429-33; L. cxlv. cxlvii. W. 520-21; Br. and Br. 181; A. ix. 223; J. ii. 140 |
| Stockelwath in Castle Sowerby, Stoneraise, 30. S.E. | Interment | H. ii. 429-33, 520-21; Br. and Br. 181; A. ix. 224; J. ii. 140 |
| Stockelwath in Castle Sowerby, Whitestones, 30. S.E. | Camp | H. ii. 429-33; L. cxlvii.; W. 520, 521; Br. and Br. 181; J. ii. 140 |
| Stone Barrow, *see* Whitbarrow. | | |
| | PRE-ROMAN. | |
| Salkeld, Great, 50. N.W. | Stone celts | A. S. I. 107; Arch. Mus. 5 |
| Seascale Hall, near, 78. S.W. | Megalithic remains. Stone circle, now gone | J. iii. 296; C. and W. iii. 250 |
| Scotby, 24. N.W. | Stone adze | Proc. S. A. n. s. viii. 493 |
| Skelton, Loaden How, 49. S.W. | Cairn, urns and incense cups | H. i. 516; J. ii. 165 |
| Solway Moss, 10. N.W. | Hafted stone celt | A. S. I. 107, 137, 138; Proc. S. A. o. s. iv. 112 |
| Spurnston, St. Cuthbert's, Carlisle, 30. N.E. | Stone hammer | A. ii. 118, 154; N. and B. i. 214; L. cxxix. |
| Studfold Gate, 62. S.W. | Megalithic remains, stone circle | C. and W. iii. 247 |
| Swineside near Millom, same as Millom Sunkenkirk, 86. S.W. | Megalithic remains<br>Stone circle | H. i. 529, 554<br>L. cxxix.; W. 409; B. A. A. xxxiv. 33; C. and W. i. 278, v. 47; J. iii. 177 |
| | ROMAN. | |
| Salkeld, Great, 50. N.W. | Altar | Proc. S. A. n. s. xiii. 219 |
| Saint Thomas' Cross, 72. N.E. | Road | C. and W. iii. 338 |
| Scaleby, 17. N.W. | Altars | H. i. 122; I. B. 57; B. R. i. 108, ii. 259; I. S. 95; Gilpin Memoirs, 36; L. S. No. 367 |
| Scalesceugh near Carleton, 31. N.W. | Coins | W. 187 |
| Seaton in Camerton, 53. N.E. | Road | W. 316 |

| Locality. | Nature of Discovery. | Where Recorded |
|---|---|---|
| | Roman—*cont.* | |
| Selker's or Seller's Bay, 85. S.W. | Shipwrecked galleys | H. i. 561; W. 316 |
| Shaking Bridge, 37. N.W. | Road | L. cxxxvi. |
| Shawk Quarries near Dalston, (Tom Smith's Leap), 30. S.W. | Written rock, now lost or destroyed | H. ii. 438, 442; N. and B. ii. 324; L. clviii. clxxxii.; W. 162; A. i. 227; Br. and Br. 183; L. S. Nos. 505, 506; Corp. 160 |
| Shire Stones, The, 80. S.E | Road | C. and W. iii. 338 |
| Silloth and Skinburness, 20. S.E. and N.E. | Inscribed stones, altar (found 1866), coins, and medals, road | W. 243; C. and W. i. 39; iii. 72, 77. G. M. L. Romano-British, i. 38-9; L. S. 904; Corp. 84, 90 |
| Southernby, Castle Sowerby, 38. S.W. | Camp, querns | H. ii. 433 |
| Stainton, 58. S.E. | Road | L. cxxxvii. |
| Stanwix, 23. N.E. | The Great Barrier of Hadrian, camp, altars, inscribed stones, roads, miscellaneous antiquities | H. ii. 577-9; N. and B. ii. 452-3; L. cxxxiv. cxxxv. cxxxix. clxxxvii.; W. 140, 179; Br. and Br. 97-8; D. S. 74; I. B. 56-7; B. R. i. 108; A. Æ. n. s. xii. 170-1; Proc. S. A. N. ii. 234; H. N. 218; C. and W. i. 78, iv. 80, ix. 174; L. S. 239-244; Corp. 159; F. 87-8 |
| Ditto, Eden Mount, 23. N.E. | Paste cameo, head of Antonia widow of Drusus. Found 1850 | A. J. xxix. 26; Arch. Mus. 10; L. S. No. 485 |
| Ditto, Bank, 23. N.E. | Tuscan capital and pillar, vault with human bones, Roman pottery | J. i. 331 |
| Ditto, near, 23. N.E. | Gravel pit, bones of horses | J. i. 332 |
| Ditto, in the Village, 23. N.E. | Figure of bagpiper, now in Carlisle Museum | A. Æ. n. s. xi. 129; Proc. S. A. n. s. viii. 74; x. 154; C. and W. iv. 80; viii. 300 |
| Ditto, Church, 23. N.E. | Sepulchral slab, figure of soldier on horseback. Found 1787 | A. x. 139; L. S. No. 481 |
| Ditto, Hyssopholm Bank, 23. N.E. | The Great Barrier of Hadrian, square fort | H. ii. 579; Br. and Br. 98 |
| Ditto, Scotland Road, 23. N.E. | Bronze javelin-head | Proc. S. A. n. s. xii. 168; C. and W. x. 277 |
| Ditto, Drawdykes, 16. S.E. | Inscribed stone | H. ii. 577, 581; N. and B. ii. 453; L. clxxxiii.; W. 179, 183; Br. and Br. 96; I. B. 56; I. S. 96; B. R. ii. 265; Proc. S. A. N. ii. 234; L. S. No. 480; Corp. 159-60 |
| Stonebarrow, or Stone Carr, *see* Whitbarrow | | |
| | POST-ROMAN. | |
| Scotby, near Carlisle, 24. N.W. | Anglo-Saxon pennies | B. A. A. xi. 350 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | EARTHWORKS. | |
| Talkin Fell, Greenlea Cross, 18. S.E. | Tumuli | C. and W. vi. 480 |
| Thirlmere, Deergarth Wood, 70. N.E. | Cairns | C. and W. iii. 248 |
| Thursby, Woodrigs or Kirksteads, ½ mile N.W. of church, 29. N.E. | Foundations | H. ii. 462-3 |
| Tongue How, 73 N.W. | Cairns and inclosures | C. and W. iii. 249 |
| | PRE-ROMAN. | |
| Threlkeld Knott, Keswick, *see* Wanthwaite Crags | | |
| | ROMAN. | |
| Tarraby, Carlisle, 16. S.E. | Inscribed altars, 1804 | G. M. L. Romano-British, i. 39, 40; I. B. 56; H. N. 300; A. Æ. o. s. i. App. 4; L. S. No. 478; Corp. 159 |
| Ditto | Altar to Apollo, a sword. Between 1840 and 1850 | Personal knowledge |
| Threlkeld, Wallthwaite, 57. S.W. | Road | W. 552 |
| Thrup, Gilsland, 13. S.W. | Camp, road | D. S. 52; Corp. 141 |
| Thursby, 29. N.E. | Gold ring | Proc. S. A. o. s. iv. 129 |
| Ditto | Road | L. cxxxvi. |
| Todholes, Cleator, 67. S.E. | Road, millstones | J. iii. 35 |
| Torpenholme, on the Petterill, between Low Street and Plumpton Wall, 49. N.E. | Road, ford | C. and W. iii. 79 |
| Tryermain Castle, 12. N.E. | Roman stones | C. and W. iii. 177; Corp. 141 |
| | EARTHWORK. | |
| Ulpha Fell, 83. N.E. | Cairns | C. and W. iii. 251 |
| | PRE-ROMAN. | |
| Ullock, near, 62. N.W. | Megalithic remains, stone circle now destroyed, urns, incense cups | C. and W. iii. 345 |
| Unthank, Gamelsby Low Fell, 40. S.E. | Interment in cistvaen | W. 503 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | ROMAN. | |
| Uldale, 47. N.W. | Road | W. 224, 260 |
| Uldale Common, 47. N.W. | Two camps | W. 260; C. and W. iii. 245 |
| Uldale, Orthwaite Hall, 47. S.W. | Camp, bronze tripod | W. 260 |
| Ullock, 62. N.W. | Road | C. and W. iii. 345 |
| Underheugh, 12. S.E. | Inscribed stone | Corp. 141, 150 |
| | EARTHWORKS. | |
| Warwick Knowe, 24. N.W. | Earthworks | H. i. 152, 153; W. 188; Br. and Br. 131 |
| Watch Hill, Troadermaen, 12. N.E. | Circular entrenchment | D. S. 57 |
| Westward, The Heights, 29. S.E. | Trenches and encampment | W. 268; A. Æ. o. s. i. 132 |
| Whitehall, 36. S.W. | Circular and square entrenchments | H. ii. 361; W. 203 |
| Woodhall, The Druid's Grove, 48. N.E. | Barrow | C. and W. iii. 245 |
| Weary Hall, Bolton Pasture, 36. N.E. | Moated enclosure | H. ii. 364 |
| | PRE-ROMAN. | |
| Wanthwaite (Wallthwaite) Crags, Thelkeld, 64. N.E. and 65. N.W. | Wall enclosures, hut circles | C. and W. i. 217, iii. 247 |
| Wanthwaite Crags, 64. N.E. | Stone celt | O. S. |
| Wastwater Screes, 78. N.W. | Flint arrow-head | Arch. Mus. 5 |
| Wetheral, 24. N.W. | Stone implements | Proc. S. A. n. s. viii. 492 |
| Whitbeck, Standing Stones Hall Foss or Force, 85. S.E. | Megalithic remains, stone circle | H. i. 553; W. 497; Br. and Br. 233; Hou. 471-2; J. iii. 121 |
| Ditto, Gutterby, Kirkstones, 87. N.E. | Megalithic remains, two stone circles, large cairn near | H. i. 554; W. 497; Br. and Br. 232; G. M. L. Archaeology, ii. 23; J. iii. 122 |
| Ditto, Annaside, 87. N.E. | Megalithic remains, stone circle | H. i. 554; W. 497; Br. and Br. 232; J. iii. 121 |
| Wigton, 29. N.W. | Stone hammers and celts, bronze flanged celt | Proc. S. A. n. s. viii. 492; A. S. I. 106; A. B. I. 73 |
| | ROMAN. | |
| Waberthwaite, 82. E. | Road and ford near the Church | C. and W. iii. 113 |
| Walbors or Wall Bowers, 12. S.E. | The Great Barrier of Hadrian, road, camp | H. i. 74; L. cxxxiv. |
| Walls Castle, Ravenglass, 82. S.E. | Camp, villa, miscellaneous antiquities | H. i. 568, 571; W. 488; Proc. S. A. N. ii. 322; Proc. S. A. n. s. vii. 357, ix. 61, xi. 210; J. iii. 210; C. and W. iii. 17, 23, 71, 337, vi. 216, ix. 296; F. 61, 64-5 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Roman—*cont.* | |
| Wallthwaite, Threlkeld, 57. S.W. | Road | W. 552 |
| Wampool Bridge, 29. N.E. | Road | L. cxxxvi. |
| Warth (Wath), Cleator, 67. S.E. | Road | L. cxxxvii.; J. iii. 35 |
| Watchcross, 17. S.E. | The Great Barrier of Hadrian. Station, roads. miscellaneous antiquities | H. i. 121, 122; N. and B. ii. 485; L. cxxxiv. cxxxix.; D. S. 72; H. N. 218; Br. and Br. 131; B. R. i. 107, 154; W. 681; L. S. 239 |
| Wath, Cleator, 67. S.E. | Road | W. 221 |
| Wath Brow, Cleator, 67. S.E. | Road | C. and W. iii. 339 |
| Waver Bridge Bank, 28. N.E. | Road | C. and W. iii. 76 |
| Wetheral, 24. S.W. | Inscribed rock | H. i. 162; W. 192; Hut. 258; A. i. 86, 97; L. S. No. 233; Corp. 160 |
| *West Coast of Cumberland* | Road round | C. and W. iii. 13-16, 70, 72 |
| Whicham, 88. S.W. | Road | C. and W. iii. 13 |
| Whitbarrow, Redstone Camp or Stone Carron, 57. S.E. | Camp and road | H. i. 412; L. cxxxvi. cxxxvii. cxlv.; W. 549; J. ii. 386; Br. and Br. 164; C. and W. iii. 78, 79, 243, iv. 320; West's Guide, 141 |
| Whitbeck, 87. N.E. | Road | C. and W. iii. 13, 71, 73 |
| Whitehall, 36. S.W. | Road near | C. and W. iii. 70, 76 |
| Whitestones, *see* Stocklewath. | | |
| Whitrigg, 49. N.E. | Road | L. cxxxvii.; C. and W. iii. 79 |
| Wigton, 29. N.W. | Inscribed stones | H. ii. 473-477 |
| Willowford, Gilsland, 13. S.W. | Camp, road, bridge | H. i. 65, 72; D. S. 52; A. Æ. n.s. xii. 163; B. R. i. 107, 152; C. and W. ix. 167; L. cxxxiv.; Corp. 141 |
| Wolsty, 27. N.E. | Foundations | C. and W. v. 258 |
| Workington, Burrow Walls, 53. N.E. | Camp, inscribed stones, miscellaneous antiquities | H. ii. 142, 260; W. 464; L. S. No. 905; C. and W. v. 22; Arch. Mus. 9; Corp. 84; F. 67 |
| Wormanby, 16. S.W. | Road | L. cxxxiv. |
| Wythrop Mill, 55. N.W. | Enamelled sword, same as entry under Embleton | C. and W. iii. 246 |
| | POST-ROMAN. | |
| Wetheral, 24. S.W. | Artificial caves | A. i. 84-6; W. 192; H. i. 160 Hut. 256 |

## WESTMORLAND.

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | EARTHWORKS. | |
| Asby, Little, 22. S.E. | Earthworks | Proc. S. A. n. s. xiii. 22; Hw 152; C. and W. xi. 384 |
| Ditto, Mask, 22. N.W. | Tumulus, human bones. Opened 1783 | Hw. 152 |
| Ditto, Gathorne Hall, 22. N.W. | Tumulus, human bones, a sword | Hw. 152 |
| Asby Scar, Great, Castlefolds, 22. S.W. | Camp and tumuli | O. S. |
| Ditto, Great, 22. N.W. | British Settlement | O. S. |
| Ditto, Little, 22. S.E. | Tumulus | O. S. |
| | PRE-ROMAN. | |
| Ambleside, 26. N.W. | Grooved stone hammer | A. S. I. 211; A. J. x. 63 |
| Ditto, 26. N.W. | Swords, spear-head, and socketted cell | A. v. 115; A. B. I. 285, 465 |
| Askham Fell, 7. S.E. | Bronze palstave or adze, 1741 | C. and W. vi. 510 |
| | ROMAN. | |
| Ambleside, 26. S.W. | Camp, coins, miscellaneous antiquities | N. and B. i. 188; W. 877; Hou. 102; Hut. 184-5; A. J. ii. 395; S. i. 241; C. and W. iii. 169, 243, 254; Corp. 72 |
| Ambleside, 26. S.W. | Inscribed stone | A. J. xxxix. 364 |
| Ditto, Borran's Ring | Square fort, coins, (?) if not the same as the camp at Ambleside | N. and B. i. 194; Hw. 213 |
| Askham Fell, 7. S.E. | Road | C. and W. i. 49 |
| *Antoninus, 10th iter of* | | A. J. xxviii. 109; B. A. A. viii. 35, xxxvi. 47; Watkin's Roman-Lancashire |
| | POST-ROMAN. | |
| Appleby Castle, 15. N.E. | Earthworks | C. and W. viii. 382; S. i. 451 |
| Asby, Great, Saylebottom, 22. N.E. | Cairns, interments, iron knife | B. B. 386; Hw. 152 |
| | EARTHWORKS. | |
| Bampton Old Church, Codale, 13. N.W. | Octangular rampart, cairn in the middle | Hw. 133 |
| Bongate, Appleby, Maiden Hold, 9. N.W. | Encampment and small fort | W. 723 |
| Brackenber Moor | Tumuli | O. S. |

| Locality. | Nature of Discovery. | Where Recorded |
|---|---|---|
| | PRE-ROMAN. | |
| Bampton, Knype Scar, 14. N.W. | British settlement | Hw. 133 |
| Ditto, Lowther Scar | Megalithic remains, stone circle | Hw. 133 |
| Brougham, Moorhouse Farm, 4. S. W. | Cist, bones, pottery | A. xlv. 411; Proc. S. A. n. s. vi. 270 |
| Brough-under-Stainmore, Brough Hill, 16. S.E. | Bronze implements | A. B. I. 53; N. and B. i. 606; Hw. 159 |
| Burton, Clawthorp, 47. S.W. | Neolithic implements | Lonsdale Magazine, i. 291 |
| | ROMAN. | |
| Borough Bridge, *see* Low Borough Bridge | | |
| Bowes Moor | Small station. *See* Maiden Castle, Stainmore | A. J. xix. 358 |
| Brougham, 4. S.W. | Station, road, inscribed stones and altars, miscellaneous antiquities | H. i. 295; N. and B. i. 8, 389-390; W. 784; Hut. 49; I. B. 45-46; A. Æ. o. s. i. App. 3, n. s. v. 139-140; B. R. ii. 297; S. ii. 68; Proc. S. A. n. s. ii. 60; L. S. 412-415, 471, 472; Corp. 73, 74 |
| Brough-under-Stainmore, 16. S.E. | Station, roads, coins, leaden seals | N. and B. i. 527; W. 728; Hut. 21-22; Proc. S. A. o. s. iii. 222-3, iv. 129, n. s. iii. 256, vii. 19, 142; C. A. vi. 117-120; A. J. xx. 181, xxiii. 62; B. A. A. xlii. 297; Hw. 158; S. ii. 318; L. S. 412 |
| Brough-under-Stainmore, the Church, 16. S.E. | Inscribed stones [one Latin, one Greek] | A. J. xxxviii. 106, 282, xlii. 145; C. and W. v. 285, 291, viii. 171, 205; A. Æ. n. s. xiii. 358; Proc. S. A. N. i. 154, ii. 3, 251; B. A. A. xlii. 294 |
| Burton, the Quamps, 47. S.W. | Foundations, millstones, | G. M. L. Romano-British, ii. 344; Hw. 230 |
| | POST-ROMAN. | |
| Brougham, 4. S.W. | Engraved circlet of gilt metal, Anglo-Saxon | A. J. iv. 63 |
| | EARTHWORKS. | |
| Crosby Ravensworth, Harberwain, 14. S.E. | Interments | Hw. 148 |
| Cunswick Hall, Skelsmergh (*same* as Skelsmergh Hall?), 34. S.W. | Mounds | S. i. 191 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | PRE-ROMAN. | |
| Casterton Hall, Kirby Lonsdale, 47. N.E. | Silver fibula or brooch of the Iron Age | A. J. vi. 69; Proc. S. A. n. s. xi. 293; Proc. S. A. S. n. s. ix. 141 |
| Clifton Cross, 3. S.E. | Interments in cists | Proc. S. A. n. s. viii. 388; C. and W. 79 |
| Crackenthorpe, Machell's Bank, 9. S.W. | Pits and urns with burnt bones | N. and B. i. 351-52; Hw. 84; S. ii. 23 |
| Crook, 38. N.W. | Stone hammer | Proc. S. A. n. s. viii. 491 |
| Crosby Garrett, 23. S.W. | Bronze armlet | A. B. I. 387; B. B. 386 |
| Ditto | Tumulus, interments in stone cists | G. M. L. Archæology, i. 148 |
| Ditto | Cairns and interments | B. B. 386-93 |
| Ditto, Raiset Pike, 29. N.E. | Long barrow, interments | B. B. 510-13 |
| Crosby Ravensworth, 14. S.E. 15. S.W. and 21. N.E. * | Bronze spoons of Late Celtic period | A. J. xxvi. 62<br>B. B. 397 |
| Ditto, Dale Moor, *same*, and 22. N.W. | Cairn, pottery, unburnt bones, beads (flat discs) | Proc. S. A. n. s. vii. 214 |
| Ditto, Druid Circle, 14. S.E. | Megalithic remains, three concentric stone circles | A. J. xxvii. 200 |
| Ditto, Gaythorne Plain, 22, N.W. | Bronze javelin head | B. B. 396 |
| Ditto, ditto, 22. N.W. | Tumuli, bones, cist | A. J. xxvii. 203 |
| Ditto, Hollin Stump, Oddendale Seal House, 21. N.E. and 22. N.W. | Cairns and interments | B. B. 396-400<br>Proc. S. A. S. iv. 444; C. and W. vi. 178; Hw. 148 |
| Ditto, Penhurrock, 21. N.E. | Tumulus of stones, human bones | W. 793; Proc. S. A. S. iv. 445; C. and W. vi. 178; Hw. 147 |
| Ditto, Oddendale, Ewe Close, 21. N.E. | British settlements | O. S. |
| Ditto, Howarcles, 22. N.W. | British settlements | O. S. |
| | ROMAN. | |
| Cliburne 8. N.E. | Inscribed stones | A. Æ. n. s. xii. 289, xiii. 185-89; Proc. S. A. N. ii. 251; H. J. xliv. 122; Proc. S. A. n. s. xi. 210; C. and W. ix. 284 |
| Clifton, 3. S.E. | Inscribed stone and altar, bronze skillet; altar found in 1845 | W. 791; G. M. L. Romano-British i. 32; S. ii. xxxvi.; I. B. 46; L. S. Nos. 809. 816; Corp. 73-4 |
| Crackenthorpe Common, 9. N.W. | Camp | N. and B. i. 351; Hou. 102; Hw. 82; S. ii. 23; Roy, Plate xvii.; C. and W. xi. 312 |
| Crawdundle Wath, I. S.E. | Written rock | N. and B. i. 371; B. R. i. 299; Hw. 96; S. ii 89; L. S. No. 750; Corp. 73-4 |

* See also Harbyrnrigge. This neighbourhood abounds in remains, and it is difficult to identify those marked on O. S. with those named in the books.

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | EARTHWORKS. | |
| Dufton Church, near, 9. N.E. | Camp: tumuli | O. S. |
| Dunmail Raise, 18. N.E. | Cairn | N. and B i. 149; Hou. 329-30; Hut. 181; Proc. S. A. n. s. xiii. 218; C. and W. iii. 253; Hw. 223 |
| Easedale Tarn, 18. S.E. | Cairns | C. and W. iii. 253 |
| Fell Foot Farm, Little Langdale, 25. S.E. | Terraced hill (, a law ting ?) | Proc. S. A. n. s. xiii. 29; C. and W. xi. 1 |
| | PRE-ROMAN. | |
| Gamelands, or Grantlands, near Raisbeck Hall, Orton, 22. S.W. | Megalithic remains, stone circle. *See* Orton | N. and B. i. 491; Hou. 103; Proc. S. A. S. iv. 443; C. and W. vi. 177, 183; Hw. 223 |
| Grasmere, near, 25. N.E. | Ditto | Hw. 223 |
| Gunnerkeld, *see* Shap | | |
| | ROMAN. | |
| Grasmere | Road | C. and W. iii. 169 |
| | EARTHWORKS. | |
| Haweswater, the Giants' Graves, 83. S.E. | Long mounds or barrows (? if not bracken stack bottoms ?) | A. J. xviii. 36; C. and W. iii. 252 |
| Haverbrack in Betham, the Castle Hill, 46. N.E. | Circular earthwork | N and B. i. 227<br>Hw. 228 |
| Howgill Green Castle, 5. N.E. | Circular fort | N. and B. i. 388; W. 755; Hw. 94 |
| How Town, Ullswater, 13. N.W | Cairns | C. and W. iii. 252 |
| | PRE-ROMAN. | |
| Hackthorpe Farm, 8. S.E. | Barrow, urn, cist | C. and W. ii. 11 |
| Harbyrnrigge, 14. S.E. | Bronze halbert | A. B. I. 270; B. B. 397; Proc. S. A. n. s. iii. 258; Arch. Mus. 6 |
| Harbyrnrigg, Iron Hill, 14. S.E. | Barrow, interment, bones, &c. | A. J. xviii. 36 |
| Ditto, Langdale, 14. S.E. | Fortified village | A. J. xviii. 37 |
| Ditto, Moor, near Witherslack, 14. S.E. | British village | A. J. xviii. 37 |
| Haversham, or Heversham, Moor End, 42. S.E. | Stone hammer | A. S. I. 179; A. ii. 124; Hw. 226; N. and B. i. 213 |
| Helsington Peat Moss, 38. S.W. | Bronze dagger | Proc. S. A. n. s. ii. 370 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Pre-Roman—*continued.* | |
| Helton Dale, Ulleswater, 7. S.E. and 13. N.E. | Bronze blade, nearly 20 inches long | Arch. Mus. 6 |
| Holborn Hill, 22. N.E. | British settlement | O. S. |
| Hugill High House, Windermere, 33. N.W. | British settlement | C. and W. vi. 86; xii. (in the press) |
| | ROMAN. | |
| Helton Fell, 7. S.E. and 13. N.E. | Road | C. and W. i. 49 |
| High Street, 13. N. and S. and 20. N. and S. | Road | C. and W. i. 71; ii. 32; iii. 169, 252 |
| Hincaster, 42. S.E. | Station | C. and W. vi. 201; Hw. 225; West's Guide, 181 |
| Hornby Hall, 4. W. | Road | C. and W. iv. 392 |
| Howgill Green Castle, 5. S.E. | Inscribed altar | N. and B. i. 388; Hw. 94; W. 755 |
| | EARTHWORKS. | |
| Kendal, Castlesteads, Helm Hill, 39. S.W. | Earthworks | W. 865; Hou. 366; I. B. 41; Hw. 205; S. i. 101; West, 179 |
| Ditto, Coneybeds, 39. S.W. | Earthworks | W. 865; Hw. 205; S. i. 101 |
| Ditto, Helse Fell, 38. N.E. | Semicircular camp, now gone | Hw. 197 |
| King Arthur's Round Table, 3. S.E. | Circular earthworks | H. i. 308-10; N. and B. i. 414; W. 780; Hou. 244-5; Hut. 90-91; B. B. 381; I. B. 43-4; Proc. S. A. n. s. xii. 91, 92; R. S. M. 128; C. and W. x. 271, xi. 187; S. ii. 133; Hw. 111; West, 167 |
| Kirkby Stephen, Croglin Castle, 23. S.E. | Earthen ring or enclosure | C. and W. v. 67 |
| Ditto, ditto, High Park, 30. N.W. | Entrenchment | O. S. |
| | PRE-ROMAN. | |
| Kirkby Lonsdale, near, 47. N.E. | British Settlement | C. and W. vii. 111 |
| Kirkby Stephen, Ashfell Windy Hills, 30. N.W. | Barrows | B. B. 382<br>C. and W. i. 22 |
| Ditto, Mallerstang, 30. E. | Cairns | B. B. 383 |
| Ditto, Wiseber, 30. N.W. | Barrow with subsequent Roman interment | B. B. 384 |
| | ROMAN. | |
| Kirkby Lonsdale, 47. N.E. | Inscribed altar found in 1684 camp, road | A. J. xxxix. 366; W. 887 |
| Kirkstone Hill, 19. S.E. | Road | L. cxxxvi. |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Roman—*cont.* | |
| Kirkby Thore, 9. N.W. | Station roads, inscribed stones, miscellaneous antiquities | N. and B. i. 379-80; W. 752-3; Hou. 103; Hut. 41 2; G. G. M. L.; Romano-British, ii. 345; Proc. S. A. o. s. iv. 128; S. ii. 54; A. Æ. n. s. v. 140; B. R. ii. 298; Hw. 89; A. xxxi. 279; C. and W. ii. 245, iii. 68-9, 70; A. J. xiv. 75, xv. 87, xvii. 59, xix. 279, xxxix. 362; Arch. Mus. 11; L. S. 385-91; Corp. 73-4 |
| Ditto, 9. N.W. | Road (The Maiden Way) | L. cxxxv.; Hw. 8, 91; N. and B. i. 8, 380; Hut. 41 |
| Ditto, Burwens Hill, 5. S.W. or 9 N.W. | Small camp | Hw. 91 |
| | POST-ROMAN. | |
| Kendal Castle, 38. N.E. | Earthworks, older than the castle | W. 838; Hou. 234; I. B. 40; Hw. 199; C. and W. ix. 178, |
| Ditto, How Hill, 38. N.E. | Moated mound | N. and B. i. 83; Hou. 234; Hut. 195; I. B. 40; Hw. 197; West, 183 |
| Kendal Vicarage, 38. N.E. | Moated mound | Personal knowledge |
| Kirkby Lonsdale Vicarage, 47. N.E. | Moated mound | W. 887 |
| | EARTHWORK. | |
| Lowther Bridge, 3. S.E. | Circular earthwork, now gone | H. i. 310; Hou. 245; C. and W. vi. 444 |
| | PRE-ROMAN. | |
| Leaset Wood, Clifton Dykes, 8. N.W. | Megalithic remains, stone circles, urns with burnt bones | Proc. S. A. n. s. viii. 389; C. and W. v. 96 |
| Loughrigg Tarn, 26. S.W. | Stone celt | Proc. S. A. n. s. vi. 438 |
| Lowther Woodhouse, 7. N.E. | Settlements, village | C. and W. xii. [in the press] |
| | ROMAN. | |
| Low Burrow Bridge, Tebay, 28. S.E. | Station | W. 765; Proc. S. A. n. s. x. 30; C. and W. vii. 78, 79, 90, viii. 1; Hw. 205 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | EARTHWORKS. | |
| Measandbeck, 13. S.E. | Cairns, standing stones, fort | C. and W. iii. 252 |
| Mickleden, 25. N.W. | Cairns and enclosures | C. and W. iii. 254 |
| Milbourne Green Castle, *see* Howgill | | |
| Middleton, 44. N.W. | Tumuli | W. 895 |
| | PRE-ROMAN. | |
| Mallerstang, 30 or 36 | Cairns, long mounds [?bracken stack bottoms] called Giant's Graves | C. and W. i. 25 |
| Matterdale (or Martindale, 12. S.E.) | Stone celt, unpolished stone sinker, winged celt of bronze | C. and W. vii. 87 |
| Mayburgh, 3. S.E. | Circular enclosure of stones | H. i. 310-2; N. and B. i. 414; W. 780; Hou. 246-8; Hut. 92-3; B. B. 381; R. S. M. 127; Proc. S. A. n. s. xii. 91, 92; S. ii. 137; Hw. 112; West. 167; C. and W. vi. 492, x. 271, xi. 187 |
| Ditto | Polished stone celt | C. and W. iii. xvii. |
| Moor Divock, Askham, 7. S.W. & S.E. | Megalithic remains, stone circles, cairns, star-fish cairns | A. J. xviii. 32; B. B. 400; Proc. S. A. S. iv. 446; C. and W. i. 241, 164, iii. 251, vi. 180, viii. 323; West. 159 |
| Morland, 8. S.E. | Stone hammer | Proc. S. A. n. s. viii. 492 |
| | ROMAN. | |
| Maiden Castle on Stainmore | Fort, coins | Hw. 162; W. 734; C. and W. v. 69; Hut. 19; Leland, also Gent. Magazine, 1862 |
| *Maiden Way, The* | Road | A. Æ. o. s. iv. 36, and various works, *passim* |
| Middleton, 43. N.E. | Milestone | O. S. |
| Moor Divock, Barton Fell | Road | C. and W. i. 164, ii. 32 |
| | EARTHWORKS. | |
| Newbiggen Moor, Loscars, 5. S.W. | Camp | O. S. |
| Ditto, Moorland Head, 5. S.W. | Camp | O. S. |
| | ROMAN. | |
| Natland, *see* Watercrook | | |
| Newbiggen Moor, 5. S.W. | Road (The Maiden Way) | C. and W. iii. 70 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | EARTHWORKS. | |
| Oddendale, *see* Crosby Ravensworth | | |
| Orton Scar, Castlefolds, 22. S.W. | Enclosure and fort | W. 763; Hw. 150 |
| Orton, Grantlands or Gamelands, 22. S.W. | Tumulus | W. 762-3 |
| | PRE-ROMAN. | |
| Orton, 21. S.E. and 22. S.W. | Cairns and interments, subsequent Anglian interments | B. B. 394-96 |
| Ditto, Raissgill Hall, 22. S.W. | Tumulus, cistvaen, skeleton | Hw. 150 |
| | ROMAN. | |
| Orton, 21. S.E. | Jewels of date of Petilius Cerealis, found 1847 [?, *see* next entry] | W. 763 |
| | POST-ROMAN. | |
| Orton Scar, 21. S.E. and 22. S.W. | Silver fibula and torque of Saxon period | B. B. 397; A. J. ix. 90; Proc. S. A. o. s. ii. 167 |
| | ROMAN. | |
| Patterdale, 12. S. | Road | Hw. 219; C. and W. iii. 169 |
| | POST-ROMAN. | |
| Pendragon Castle, 30. S.E. | Earthworks older than Norman Castle | W. 750; Hut. 198-99; Hw. 177 |
| | EARTHWORKS. | |
| Raisbeck, 18. E. | Cairns | Hw. 223 |
| Ravenstonedale, Rasate (Rasett), 30. N.W. | Tumuli, skeletons | W. 767; Hw. 180; S. ii. 269 |
| Ray Cross, Stainmore, 24. N.E. | Camp. | W. 735; Hut. 13-16; C. and W. v. 70; Roy, Plate xvii.; A. J. vi. 350; Hw. 163-64 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | PRE-ROMAN. | |
| Ravenstonedale Common, Hardigg, 29. S.E. | Barrow, interment | B. B. 393 |
| Ravenstonedale, Rotherbridge, 30. N.W. | Megalithic remains, stone circle | W. 767; Hw. 180; S. ii. 269 |
| | ROMAN. | |
| Ray Cross, Stainmore, 24. N.E. | Inscribed stone | Hw. 164; Hut. 13 |
| Redlands Camp, *see* Crackenthorpe | | |
| Rydal, 14. N.W. | Urn with "ashes and other Roman remains" | Hw. 220; West, 77 |
| | EARTHWORKS. | |
| Sleagill-in-Newby, 14. N.E. | Interments, two skeletons with brazen rings on their arms | Hw. 143 |
| Shap Wells | Cairns | C. and W. iii. 253 |
| Stainmore, *see* Ray Cross | | |
| | PRE-ROMAN. | |
| Selside, Whitwell Folds, 34. N.W. | Stone celt | Proc. S. A. n.s. xi. 230 |
| Shap, near, 14. S.W. | Stone celts, stone ring, jet ornament | Arch. Mus. 5 |
| Ditto, Gunnerkeld, 14. N.W. | Megalithic remains, stone circle | A. J. xviii. 32; W. 807; B. B. 382; B. A. A. xxxv. 368; Hw. 140; Proc. S. A. S. iv 443; C. and W. iv. 537, vi. 177 |
| Shap, Karl Lofts and the Guggleby Stone, 14. S.W. and 21. N.W. | Megalithic remains, stone circle, and avenue | N. and B. i. 477; W. 807; G. M. L., Archæology, ii. 72-5, 321-5; B. B. 381; I. B. 42: A. J. i. 389, xviii. 24: Hw. 139; R. S. M. 129; West, 169; Proc. S. A. n.s. x. 314 |
| Ditto. Ralfland Forest, 21. N.W. | Tumuli | O. S. |
| Ditto, Stanirase, Selsitraise, 13. | Cairns, urns, interments | A. J. xviii. 33 |
| Strickland, Great, near Bradley, 8. S.W. | Neolithic implements | Personal knowledge, H. S. C. |
| | ROMAN. | |
| Sandford, 16. S.W. | Road and tumuli | W. 772 |
| Scots Rake, 19. S.E. | Road | O. S. |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Roman—*cont.* | |
| Shap, The Brins, 14. S.W. | Coins, gold and silver | H. N. 254 *n.* |
| Stainmore, Blackmoor Gate, 16. S.E. | Forged Image, with inscription | A. J. xliv. 128; C. and W. xi. 296 |
| Ditto, 17. and 24. | Road | N. and B. i. 8; W. 734 |
| Ditto, *see* Maiden Castle | | |
| | EARTHWORKS. | |
| Troutbeck, Spying How, The Raise, 26. S.E. | Cairn, cistvaen, human bones | N. and B. i. 188; Hw. 217; S. i. 276 |
| Ditto, Woundel Raise, 19 S.E. | Cairn | N. and B. i. 188; Hw. 115; S. i. 176 |
| Trostermount-on-Ulleswater, 7. S.W. | Enclosure (a cranoge?) | C. and W. i. 160 |
| | PRE-ROMAN. | |
| Tebay Fell, 28. N.E. | Bronze spear-head, 1891 | Proc. S. A. n. s. xiii. 349 |
| Temple Sowerby, 4. S.E. | Stone hammer | Proc. S. A. n. s. viii. 492 |
| Troutbeck, near Windermere, Chapel Ridding, 26. S.E. | Neolithic implement | Personal information, H. S. C. |
| | ROMAN. | |
| Tebay Gorge, 28. S.E. | Road through | C. and W. iii. 11, 70, 170, 187 |
| Temple Sowerby, 4. S.E. | Milestone, *in situ* | Hw. 92 |
| | POST-ROMAN. | |
| Tebay, Castle How, 28. N.E. | Moated mound | W. 765; Hw. 150 |
| Ditto, Greenholme Castle How. 28. N.E. | Ditto | W. 765 |
| | EARTHWORKS. | |
| Warcop, 16. S.W. | Castle, foundations | N. and B. i. 606; Hou. 15; Hw. 155 |
| Warcop, Coupland Beck, Sandford, 15. N.E. | Encampments | W. 772; Hw. 156; S. ii. 345 |
| | PRE-ROMAN. | |
| Warcop, Coupland Beck, Sandford, 15. N.E. | Tumuli and urn, opened in 1766. A subsequent Anglo Saxon interment | N. and B. i. 609-10; Hut. 27-28; B. B. 385-6; A. iii. 273; Hw. 156; S. ii. 343; W. 772 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Pre-Roman—*cont.* | |
| Whinfell Tarn, 34. W. | Bronze spear-head | Proc. S. A. n. s. xii. 227 |
| Windrigg Hill, 14. N.E. | Tumulus | O. S. |
| | ROMAN. | |
| Warcop, 16. S.W. | Station and road | W. 769 |
| Watercrook, near Kendal, 38. S.E. | Station, inscribed stones and altars, miscellaneous antiquities | W. 865; Hou. 102, 366; Hw. 202; S. i. 100; West. 179 I. B. 39-41; B. R. ii. 300; Proc. S. A. n. s. xiii. 265; Proc. S. A. N. iii. 280; L. S. No. 819; Corp. 72 |
| Windermere, Curwen's or Belle Island, 32. S.E. | Villa | N. and B. i. 625; Hw. 220 |
| Winderwath, 4. S.E. | Road and ford | N. and B. i. 400; C. and W. iv. 292 |
| Winton Fell, Kirkby Stephen, 23. E. | Romano-British gold armlet | Proc. S. A. n. s. xii. 322 |
| Woundale, 19. S.E. | Road | C. and W. iii. 169 |
| | EARTHWORK. | |
| Yanwith Wood, Castlesteads, 7. N.E. | Circular fort with triple enclosure, burial place | C. and W. iii. 252<br>Hw. 110 |

## LANCASHIRE—NORTH-OF-THE-SANDS.

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | PRE-ROMAN. | |
| Aldingham (parish), Baycliffe, 22. N.W. | Sepulchres (period uncertain) | Jo. 96 |
| Ditto, Gleaston, 22. N.W. | Neolithic implement | L. M. iii. 383; Cam. (Gough) |
| Ditto (parish), Gleaston Castle, 22. N.W. | Bronze celt | A. V. 106<br>A. B. I. 43 |
| Ditto, near the "Moat," and Colt Park, 22. N.E. | Sepulchral urns | W. F. 389 |
| Ditto (parish), Roosebeck, 22. S.W. | Neolithic implement | Fur. ii. 17 |
| Ditto (parish), Scales, 22, N.E. | Sepulchral urn with burnt bones, interment, old ditch | W. F. 392 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | POST-ROMAN. | |
| Aldingham, Aldingham Moat, 22. N.E. | Moated mound and moated square enclosure | Lanc. iv. 645; W. F. 389; C. and W. iii. xxx.-i., ix. 409; A. xxxi. 452 |
| Ditto (parish), Roosebeck, 1870, 22. S.W. | Interments (seven skeletons in two rows; feet of one row against heads of the other) | Fur. ii. 17 |
| | EARTHWORKS. | |
| Banishead Moor, on south side of Walney Scar road between Coniston and Torver Beck, 4. N.E. | Cairns, walled enclosures, ring mound | C. and W. iii. 254 |
| Birkrigg Common, near Urswick, "Appleby Slack," 16, S.E. | Enclosure and tumulus | A. xxxi. 450<br>Barb. 20 |
| Blawith, 7. N.E. | Mounds of scoriae (Bloomery) | C. and W. viii. 86 |
| | PRE-ROMAN. | |
| Barrow-in-Furness | Neolithic implement | Lanc. and Chesh. Ant. Soc. v. 328 |
| Birkrigg Common, near Urswick, Sunbrick, 16. S.E. | Megalithic remains | A. xxxi. 450<br>Barb. 22 |
| Broughton-in-Furness, 6. S.E. | Neolithic implement | Lanc. iv. 691<br>G. M. L. Arch. ii. 4<br>Lanc. and Chesh. Ant. Soc. iii. 215 |
| | EARTHWORKS. | |
| Cartmel (parish), summit of Hampsfell, 12. S.E. | Foundations | C. and W. viii. 264 |
| Ditto (parish), Hampsfell Hall, 12. S.E. | Artificial mound, (?) barrow | St. 474 |
| Ditto (parish), Holker Bank, 17. N.W. | Heaps of stones, circle of loose stones | St. 254 |
| Ditto (parish), Hoobarra Hill, 17. N.W. | Heaps of stones | St. 254 |
| Colton (near), Bethecar Moor, 7. N.E. | Scoriae (Bloomery) | Information |
| Coniston Hall, field called "The Spring," and in Old Deer Park, 4. N.E. | Mounds of scoriae (Bloomeries) | C. and W. viii. 87 |
| Coniston Lake (near), Bethecar Moor, 1¼ miles east of Water Park, 7. N.E. | Cairn | O. S. |
| Ditto, at mouth of Moor Ghyll, Torver Back Common, 4. S.E. | Heaps of scoriae (Bloomery) | C. and W. viii. 86 |
| Ditto, Nappingtree, near Hoathwaite, 4. S.E. | Scoriae (Bloomery) | C. and W. viii. 86 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Earthworks—*cont.* | |
| Coniston Lake (near), west of the foot of, near Stable Harvey Moss, 7. N.W. | Cairn | O. S. |
| Coniston, Scrow Moss, ¾ mile south of the copper mines, 4 N.E. | Walled enclosure | C. and W. iii. 254 |
| Ditto, Foul Scrow, ¼ mile south of copper mines, 4. N.E. | Cairns | C. and W. iii. 254 |
| | PRE-ROMAN. | |
| Cartmel (parish) | Neolithic and bronze implements | St. 250, 255 |
| Ditto, Aynsome? 12. S.E. | Neolithic implement | C. and W. viii. 266 |
| Ditto, Aynsome Lane, 12. S.E. | Urn and bone ashes | St. 251 |
| Ditto (parish), Ayside, Newby Bridge, 12. N.E. | Neolithic implements | A. S. I. 178; C. and W. viii. 266 |
| Ditto, new burial ground, Dec. 1889, 17. N.E. | Urn and bone ashes | Personal knowledge |
| Ditto (parish), Yew Tree Field, Allithwaite, 1834, 17. E. | Sepulchral urn | Lanc. iv. 718; R. L. 215 |
| Ditto, Kirkhead, near Allithwaite, 17. S.E. | Cavern, neolithic implements, bones, pottery | Barb. 12 |
| | Bronze celts and miscellaneous objects, Roman coin | A. B. I. 168; A. J. xxv. 324 |
| Ditto, Cark, 17. W. | Neolithic implements | C. and W. ix. 203<br>Lanc. and Chesh. Ant. Soc. v. 327 |
| Cartmel (parish) Town dykes at Flookburgh, 17. S.W. | Neolithic implements | St. 250 |
| Ditto (parish), Flookburgh, 17. S.W. | Bronze palstaves | C. and W. viii. 265 |
| Colton, Rusland, 8. W. | Neolithic implement | C. and W. ix. 203 |
| | ROMAN. | |
| Cartmel (parish) | Miscellaneous antiquities | Lanc. iv. 717 |
| Ditto, Broughton, 12. S.E. | Coin | Lanc. iv. 718; R. L. 243 |
| Ditto, Castlehead, 13. S.W. | Stronghold, coins, miscellaneous objects | Lanc. iv. 717; St. 204; Barb. 21; R. L. 215 |
| Ditto, near Walton Hall, Upper Holker, 17. N. | Hoard of coins in pot | Lanc. iv. 717; St. 244<br>R. L. 234 |
| | POST-ROMAN. | |
| Cartmel, Castlehead, 13. S.W. | Coins (stycas) | Lanc. iv. 717; St. 4, 204 |
| | EARTHWORKS. | |
| Dalton, churchyard, 16. S.W. | Remains of fosse and rampart, supposed Roman camp | Lanc. iv. 660; W. F. 343; R. L. 216 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Earthworks.—*cont.* | |
| Dunnerdale Cockleybeck Fell, a little below Irongate | Cairns | C. and W. iii. 254 |
| Dunnerdale Fell, 2½ miles north of Broughton in Furness, 6. N.E. | Settlement, stone wall enclosures and cairns, standing stone | C. and W. iii. 254 |
| Ditto, 3 miles north of Broughton in Furness, 6. N.E. | Large heap of scoriae (Bloomery) | C. and W. viii. 86, iii. 254 |
| Dunnerdale Fells, between Stainton Ground and Hollow Moss, 3. S.E. | Cairns | C. and W. iii. 254 |
| | PRE-ROMAN. | |
| Dalton, Black Hagg (half a mile west), 15. S.E. | Copper ? weapons | W. F. 345 |
| Dalton (parish) Lindale, 16. S.W. | Neolithic implement | A. xxxi. 452 |
| | ROMAN. | |
| Dalton, Elliscales, 16. S.W. | Coins and skeletons | Lanc. iv. 667 |
| Ditto (Goldmire), May, 1803, 15. S.E. | Paved road | W. F. 9<br>R. L. 216 |
| | PRE-ROMAN. | |
| Furness (exact locality unknown) | Bronze armlet | Personal knowledge |
| Ditto | Bronze celt | Personal knowledge |
| Grange-over-Sands, 17. N.W. | Neolithic implement | Personal knowledge |
| | POST-ROMAN. | |
| Grange-over-Sands, Merlewood, 17. N.E. | Bone Cave, with Northumbrian stycas and Roman pottery | C. and W. xii. 277 |
| | EARTHWORKS. | |
| Hawkshead Hall, High Park, 5. N.W. | Rampart | C. and W. ix. 201 |
| Hawkshead (parish), Monk Coniston Moor, 5. N.W. | Cairns | C. and W. iii. 254 |
| | PRE-ROMAN. | |
| Hawkshead (parish), Bank Ground, on east side of Coniston Lake, 4. N.E. | Neolithic implement | C. and W. ix. 204 |
| Ditto, Borwick Ground, 1891, 2. S.W. | Neolithic implement | Personal knowledge |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | Pre-Roman.—*cont.* | |
| Coniston Lake, the Castle (or Yewfield Castle), 2. S.W. | Neolithic implement | C. and W. ix. 203 |
| Hawkshead Hall Estate, the Frith, 5. N.W. | Cairn with interment and flint knife | C. and W. ix. 202, 497-8; Proc. S. A. 2 S. xi. 229 |
| Hawkshead (parish), Syke Side, 2. S. W. | Neolithic implement | C. and W. ix. 204 |
| | ROMAN. | |
| Hawkshead (parish) | Coin | Personal knowledge |
| Ditto, east side of Satterthwaite, 5. S.W. | Road (supposed Roman) | Lanc. iv. 704; A. J. xxv. 337; R. L. 85 |
| | POST ROMAN. | |
| Hawkshead, Out Dubs, foot of Esthwaite Lake, 5. S.W. | Six felt hoods (date uncertain) | C. and W. ix. 205<br>Proc. S. A. 2 S. xi. 231 |
| | EARTHWORKS. | |
| Kirkby, Ashlack Hall, 11. N.W. | Scoriae (Bloomery) | C. and W. viii. 91 |
| Kirkby (parish), Coal Ash, Grizebeck, 11. N.W. | Remains of enclosure | Barb. 20 |
| Ditto, High Haume, near Ireleth, 16. W. | Mound and Neolithic implements | Lanc. iv. 691; Barb. 20; W. F. 345; L. M. iii. 383; A. xxxi. 453 |
| Kirkby Ireleth (parish), Heathwaite and Woodland Fells, Tottlebank Moss, Stone Rings, Great Burney, 7. S.W. | Settlement and Cemetries. Large and small walled enclosures, cairns, pits, platforms, whetstone | Barb. 24 |
| | PRE-ROMAN. | |
| Kirkby Ireleth, Heathwaite | Interments, with fragment of a stone ring | A. xxxi. 452 |
| Ditto, Fell; Kirkby Moor, near Gill-house Beck, 11. N.W. | Remains of stone circle, cairn, cist, neolithic weapon | A. xxxi. 450; Barb. 23 |
| Ditto (parish), High Haume, 16. W. | Neolithic implements | L. M. iii. 383; Lanc. iv. 690; Barb. 20 |
| Ditto, near Ireleth Mill, 16, N.W. | Urns | Barb. 30 |
| | EARTHWORK. | |
| Lowick, Goathwaite Moor, 11. N.W. | Ring mound | Barb. 23 |
| | PRE-ROMAN | |
| Lowick, near Knapperthaw, 11. N.E. | Remains of megalithic circle | Barb. 23 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | EARTHWORKS. | |
| Pennington, The Castle Hill, 16. N. W. | Moated enclosure | Lanc. iv. 669; Whi. ii. 404; W. F. 407 |
| Ditto, Ella Barrow, and Coninger Wood, 16. N.W. | Mound (tumulus ?) | Lanc. iv. 671; W. F. 408; A. xxxi. 452 |
| | PRE-ROMAN. | |
| Page Bank, between Leece and Rampside, 22. S.W. | Bronze dagger | Personal knowledge |
| Pennington, The Castle Hill, 16. N.W. | Neolithic implement | C. and W. ix. 503 |
| | POST-ROMAN. | |
| Pennington, Coninger Hurst, 16. N.W. | Tomb, sword (period uncertain) | Barb. 30 |
| | EARTHWORK. | |
| Rusland and Graythwaite (between), Cinder Hill, 8. N.W. | Scoriae (Bloomery) | Information |
| | PRE-ROMAN. | |
| Rampside Churchyard, near Barrow, 22. S.W. | Neolithic implement | Lanc. and Chesh. Ant. Soc. v. 328 |
| Roose, near Barrow-in-Furness, 21. E | Cairn with interment and urns | A. J. iii. 68 |
| | EARTHWORK. | |
| Seathwaite, Long House Close, half mile east of Tongue House, 4. N.W. | Walled enclosures | C. and W. iii. 2[illegible] |
| | PRE-ROMAN. | |
| Stainton, on south side of road between Stainton and Dalton, 16. S.W. and 22. N.W. | Sepulchral urns and a bronze weapon | Fur. ii. 37 |
| Ditto, near Dalton (Urswick parish), 22. N.W. | Urn | Barb. 31 |
| Ditto, near Dalton, 22. N.W. | Two stone celts and an iron implement, found in an old iron working | Barb. 31 |

| Locality. | Nature of Discovery. | Where recorded. |
|---|---|---|
| | EARTHWORKS. | |
| Torver, Bleaberry Haws, 4. S.W. | Rampart, ring mound, small stone circle, cairns | C. and W. iii. 254, ix. 499 |
| Ditto, Hare Crag, three-quarters of mile west of Little Arrow Farm, 4. S.E. | Ring mound | Personal knowledge |
| Ditto, Low Common, one mile west of mouth of Torver Beck, 4. S.E. | Cairns | C. and W. iii. 254 |
| | PRE-ROMAN. | |
| Torver, 4. S.E. | Neolithic implement | C. and W. ix. 203 |
| Ditto, Bleaberry Haws, 4. S.W. | Cairns, cist, flint flakes, pottery, bone instrument, interments | C. and W. ix. 502 |
| | EARTHWORKS. | |
| Ulverston (Mount Barrow), 16. N.E. | Tumulus | Lanc. iv. 686; W. F. 9<br>R. L. 226 |
| Ditto (parish), Osmotherly Common, 11. S. | Enclosure (now destroyed) | Barb. 20 |
| Urswick, Holme Bank Estate, 16. S.E. | Camp, near Appleby Slack, Birkrigg | Barb. 20 |
| Ditto (Little), "The Stone Walls," 16. S.W. | Rectangular and circular wall foundations | Lanc. iv. 652; W. F. 396; Barb. 17; C. and W. iii., xxvii.; A. xxxi. 449 |
| | PRE-ROMAN. | |
| Ulverston, 16. N.E. | Neolithic implement | Peel Park Mus. Manchester; C. and W. ix. 204 |
| Ditto | Neolithic implement | Personal knowledge |
| Urswick (Little), near "The Stone Walls," 16. S.W. | Bronze instrument, sword (?), rings | Barb. 18; C. and W. iii. xxvii. |
| | ROMAN. | |
| Ulverston, in the town and below the mill, 16. N.E. | Coins | Lanc. iv. 686 |
| Ditto, Red Lane, near Mountbarrow, formerly called "The Street." March 7, 1774, 16 | Paved road | Lanc. iv. 686; W. F. 9; C. and W. iii. 71; R. L. 85 |
| Ditto, near Conishead, 16. E. | Coin found c. 1800 | Evans; Furness and Furness Abbey (1842), 119 |
| Urswick (parish), under Bardsea Park wall, 16. S.W. | Pavement | W. F. 9 |
| Ditto (Little), 1798, 16. S.W. | Coin | Lanc. iv. 651; W. F. 10 |

| Locality. | Nature of Discovery. | Where Recorded. |
|---|---|---|
| | EARTHWORK. | |
| Woodlands, between Broughton and Coniston, 7. W. | Mounds of scoriae (Bloomery) | C. and W. viii. 86 |
| | PRE-ROMAN. | |
| Woodlands, Bridgend, and Nether Bolton Farms, 7. N.W. | Neolithic implements | Personal knowledge |
| Wray, High (near Ambleside), 2. S.E. | Neolithic implements | C. and W. ix. 204 |

# ARCHAEOLOGICAL MAP OF CUMBERLAND & WESTMORLAND AND LANCASHIRE NORTH OF THE SANDS.

Scale of Eng. Miles

0 ½ 1 2 3 4 5 6 7 8

**PRE-ROMAN**

- Earthworks, walled enclosures, tumuli, &c.
- Megalithic Remains, stone circles, &c.
- Miscellaneous.
- Settlements, Enclosures, Oppida.
- Bronze Weapons, &c.
- Interments, cairns, &c
- British tracks.

**ROMAN**

- The Wall, &c. of Hadrian
- Walled towns
- Castra.
- Inscribed Rocks
- Interments & Cemeteries.
- Foundations of buildings.
- Coins & miscellaneous
- Potteries.
- Roman roads.
- Probable Roman roads.

**POST-ROMAN**

- Interments & Cemeteries.
- Coins & miscellaneous
- Runic Inscriptions.
- Moated mounds, settlements &c.

3° 40′ 3° 20′ 3° 2° 40′ 2° 20′

55° 54° 40′ 54° 20′

3 40 3 20 3 2 40 2 20

Prepared by permission from the Ordnance Map.

London Stanfords Geog.l Estabt

XXII.—*Excavations on the site of the Roman city at Silchester, Hants, in* 1892. *By* George E. Fox, *Esq., F.S.A., and* W. H. St. John Hope, *Esq., M.A., Assistant-Secretary.*

Read February 23 and March 2, 1893.

We have the honour to bring before the meeting to-night the record of the third year's excavations on the site of the Roman city at Silchester.

The work achieved during the course of the past year has been:

1. The thorough examination of the entire square, *Insula* IV., of which the *forum* and *basilica* form the greater part. This has produced a larger variety of objects from the trenches and rubbish pits on its northern side than has ever previously been found, and has brought to light at its south-eastern angle evidence of exceptional importance as to the existence of Christianity in the city.

2. The working out of portions of *Insulæ* V. and VI. These lie directly east of *Insula* IV., and are covered, with the exception of a narrow strip on the western side, by the pasture land attached to the farm. As the hedge bounding this land runs at only a short distance from *Insula* IV., it was thought well to excavate quite up to it. By so doing we were enabled to trace the line of street forming the eastern side of the *forum Insula*.

3. A commencement was made upon the large *Insula* No. VII. lying due south of *Insula* IV. Here a house of some size and importance was found not far from the north-west corner, which appeared to be connected with that described by Mr. F. G. Hilton Price, F.S.A., in *Archaeologia*, Vol. L. It showed curious traces of alterations and rebuildings that render its plan peculiarly confused and intricate. It has yet to be studied and elucidated.

4. A considerable portion of ground to the north of the baths was trenched, and such discoveries as were made recorded.

5. A thorough examination of the system of drainage of the baths themselves

was carried out, and produced interesting results. The excavations showed the manner in which the waste water from the different chambers was utilised to flush the drains and sewers. These were traced for some distance to a singularly constructed sluice-gate in the city wall. The system of drainage has been planned and possibly a model will be made of the gate.

The account of these discoveries, together with those in *Insula* VII., and in the land north of the baths will form the substance of a report to be communicated to the Society at a later date. In the present paper it is proposed to deal only with the explorations conducted in *Insulæ* IV., V. and VI.

## THE ARCHITECTURAL HISTORY OF THE *FORUM* AND *BASILICA*.

*By* George E. Fox, *F.S.A.*

In describing the discoveries of the past season, it will be best to begin with *Insula* IV., that which contains the *forum* and *basilica* of the Roman city.

Between the years 1867 and 1873, the Rev. J. G. Joyce, F.S.A., whose explorations at Silchester are well known, excavated the buildings constituting this group, and gave an account of his discoveries in papers contributed to *Archaeologia*.[a]

But his account, although an admirable and important contribution to our knowledge of the site, was not of a sufficiently detailed character, as to the different structures, to entirely satisfy the requirements of the present time. The minor objects of antiquity received, perhaps, somewhat undue attention, and so little value was placed on the architectural remains of both *forum* and *basilica*, that they were for the most part left by their discoverer to perish from exposure to rain and frost on the spot where they were turned up in the excavations. No adequate plans were published of the buildings, nor were sufficient illustrations given of their remains.

Under such circumstances it has been deemed advisable to properly plan the *basilica* and *forum*, whose foundations, left exposed since their discovery five and twenty years ago, are becoming less and less distinct year by year, and also to gather together the architectural fragments still visible, unhappily far too few, and place them with the other collections at Reading, thus rendering them easily available for study.

The results of our work on this portion of the city have now to be described.

[a] Vol. xlvi. p. 349 *et seq.*

The *forum* and *basilica* occupy, as has been said, the greater portion of *Insula* IV. (See plan, Plate XLI.) A space 96 feet wide by 386 feet long lies to the north of the compact mass of buildings, and between it and a street on the south is a similar space of the same length but 128 feet wide. On the east a third space occurs, with a length of 278 feet and a width of 76 feet, divided from *Insulæ* V. and VI. by a street running north and south. On the west side, the *basilica* and its dependencies abut on the great main street running from the north to the south gate.

The *forum* proper consists of an open area about 142 feet long from north to south, by 130 feet wide from east to west. On three sides, north, east, and south, this area is lined by ambulatories; the west side is bounded by the wall of the *basilica*, and here the ambulatory is wanting. Behind the ambulatories, and sheltered by them, lies a line of chambers, mostly rectangular in plan, but with some amongst them notably differing from that form. External to all occurs another ambulatory, which surrounds not only the *forum* but the *basilica* and its dependencies also, being broken, perhaps, by the projection of the north and south ends of the latter building. Thus it will be seen that the various offices and chambers of the *forum* lie between two lines of ambulatories, an inner and an outer one.

The roofs of these ambulatories were, presumably, supported by columns. The sleeper or foundation walls to uphold such supports exist, and the bases of columns have been found, such as would be placed on these walls.

One of these, an Attic base, discovered on the line of the sleeper wall of the outer ambulatory close to the north-east angle of the *basilica*, is figured on Plate XXXVII. fig. 3, and Plate XXXIX. fig. 13. Although lying near its proper position (*i.e.* on the wall), it was not *in situ*. A fragment of a Doric capital, found in the *forum*, which, from the agreement of its size with its base may have belonged to one of the columns of the ambulatories, is also figured on Plate XXXVII. fig. 2. Pieces of drums fitting these bases have been dug up in the *forum*.

The foundation wall of the colonnade of the ambulatory, though traced in its entire circuit, is now in great part buried under the foot of the spoil heaps thrown up in the excavation of the *forum*. But the supporting rubble foundation for the columns of the inner ambulatory that formed the boundary of the open area has remained uncovered since it was first dug out.

A careful examination of this wall on the north and south sides of the *forum* area showed that at intervals of 14 feet 5 inches from centre to centre there were

either masses of ashlar lying upon and built into it, or gaps in its surface, now filled with earth, from which similar ashlar work had been extracted. The natural inference from these facts was, that the masses of stone with the alternating gaps showed the places where once stood the columns forming the colonnade of the north and south ambulatories. If, therefore, 14 feet 5 inches be taken as representing the distance from centre to centre of the columns, and the diameter of the shafts at 1 foot 10 inches or 1 foot 11 inches as given by the existing bases, an intercolumniation of about $6\frac{1}{2}$ diameters will be the result. Such a space between the points of support was far too wide to be bridged by stone architraves, and the conclusion inevitably follows that these were of timber, as well as the other portions of the entablature supported by them.

The irregular way in which these columns are set out in relation to the divisions of the buildings behind them is noteworthy of remark, but classical examples may be found in which the dispositions are almost as irregular. It is possible that the inner ambulatory of the *forum* was rebuilt at a late date, as fragments of the bases of large columns with mortar adhering to them, such as might have adorned the principal gateway, were dug out from the rubbish of the foundation walls (Plate XXXIX. fig. 15).

The height of the columns, including base, shaft, and capital, could scarcely have been less than 15 feet 6 inches. The width of the inner ambulatories was 16 feet. The outer ambulatories had an average width of 12 feet 6 inches, but the ambulatory which lines the great street on the west was 15 feet wide.

The columns on the inner ambulatories, as has been noticed, stood on massive stones which rested on or were partly incorporated with the rubble supporting wall. The outer edges of these stones towards the open area formed a curb, and were joined together by other stones, making the curb a continuous step from 9 to 12 inches in depth towards that area. A certain number of these curb stones are lying in the south ambulatory, where perhaps one is still *in situ*. The floor of the ambulatories was doubtless laid flush with the curb stones, which showed as a border to it. In all probability this floor was of brick, or laid with *opus signinum*, for there still remains at the west end of the north ambulatory some cement base. Elsewhere, both in the ambulatories and in the chambers, not a vestige of flooring remains.

Hitherto the description given has had reference more particularly to the inner north and south ambulatories, but that forming the east side requires special notice. It is longer than the other two, and its colonnade was compli-

cated by the insertion of some structure of the description of a triumphal arch, forming the main entrance into the area of the *forum*. A massive substructure of rubble concrete 41 feet long and 5 feet wide breaks the line of this inner colonnade, and a similar mass 49 feet long by 5 feet wide, ranging with it, equally interrupts the outer one. These masses of foundation are not placed in the centre of this side of the *forum*, but about 5 feet to the south. This divergence from symmetry in the plan was probably caused by an enclosure to accommodate the main entrance to the direction of a principal street which ran in a straight line up to this point from the east gate.

A spacious vestibule appears to have been constructed between these masses of foundation, interrupting the line of chambers lying between the two ambulatories. If it was adorned with columns, which is possible (for the base of one of a simpler character than those already mentioned was dug up here); it must have formed with the gateways a handsome entrance to the *forum*.

Conjecture as to the superstructure supported by the masses of concrete on the line of the colonnade of the inner ambulatory would be idle, but some sort of hint is afforded by certain footings attached to the outer foundation, which seem to imply that the gateway erected here, facing down one of the principal streets of the city, had some architectural pretensions, and was decorated with columns and other features. A base of Attic character, evidently originally attached to a wall, and showing part of a shaft 2 feet 8 inches in diameter, lay in the *forum* (Plate XXXIX. fig. 12). It might have formed a part of this gateway, for it was too small to have been one of the columns from the *basilica*. Nor is it impossible that the most perfect of the Doric capitals unearthed by Mr. Joyce at the south gate of the city and figured in our first report on Silchester [a] may have served as the capital to some shaft decorating this entrance. It had certainly been used as the capital of some half-column, and did not belong to the south gate, where it was found with other architectural fragments.

To return for a moment to the plan of the inner east ambulatory, the colonnade of which was interrupted by one of the gateways. From the massive foundations of the latter to the southern end all the stones which once supported the columns have been swept away, but between the gateway and the northern end occur three heavy masses of ashlar of different forms, lying at regular intervals upon the line of the foundation wall. They have scarcely the appearance of supports to columns, and if the spacing of these latter was arranged in some different

[a] *Archaeologia*, LII. pl. XXXII.

way from that employed in the north and south colonnades, it might be surmised that these fragments of ashlar formed the groundwork of pedestals of statues or other monuments, and that the largest and most northern of the three might be the remains of steps to a tribune in the north-east corner of the *forum* area. But all here is a matter of conjecture.

The *forum* area was trenched but not excavated by Mr. Joyce, who regretted that he could not entirely clear it. At the same time he noted that his trenches revealed nothing of interest. A considerable portion of this area was examined last year with the hope of finding fragments of inscriptions, and the pedestals or remains of statues, and also to ascertain the method of drainage. In both instances that hope was not fulfilled, though some curious facts came to light. No remains of statues or inscriptions were found, nor any gutter stones or drains along the lines of the colonnade. The trenches, however, showed that the whole area, like the streets, had been covered by a mass of gravel over 2 feet in thickness, whose upper surface lay from 9 to 12 inches below the floors of the surrounding ambulatories. Beneath this gravel was a mortar bed 5 inches thick. It seemed as if there had been an intention to floor the area in a more solid manner than it was found possible afterwards to carry out. This fact may partly account for the barrenness of the soil in objects of interest. The surface layer, about 2 feet thick, overlying the gravel was full of *débris* of brick, but contained scarcely anything else. Two pits or wells were found in the area. One near the north-east angle, about 15 feet deep, appeared to have been steined with flints, but this could not be ascertained with accuracy. Many flints were found in the bottom, also a fragment or two of coarse pottery, an iron *stylus*, and some bones, principally of dog, though there were some of sheep, and one of pig.

The second pit was not far from the middle of the area. It had the same depth as the first and seemed to contain traces of wooden framing. The only objects found in it were two jaw-bones of an ox. It is evident that these pits could have been sunk only at the latest period of the city's existence, when the *forum* was probably already in a ruined condition.

Whatever the method of drainage may have been (and on this point Mr. Joyce gives us no information nor does he record any discoveries), there was no doubt as to the manner in which the water was carried away from the area. A depression in the ground between the foundations of the gateways on the east side of the *forum* indicated the presence of a drain at this spot. Excavation showed that its course to the street outside lay in the centre line of the gateways, and that it terminated in the roadway just in front of the great entrance. This termination

FIG. 1.

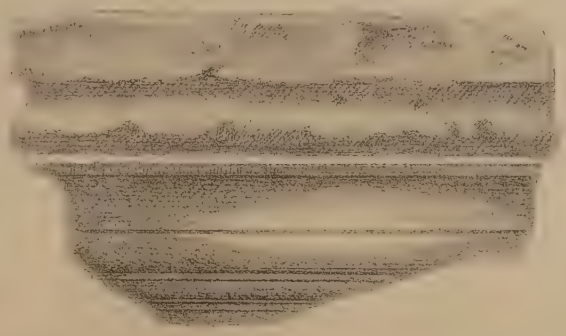
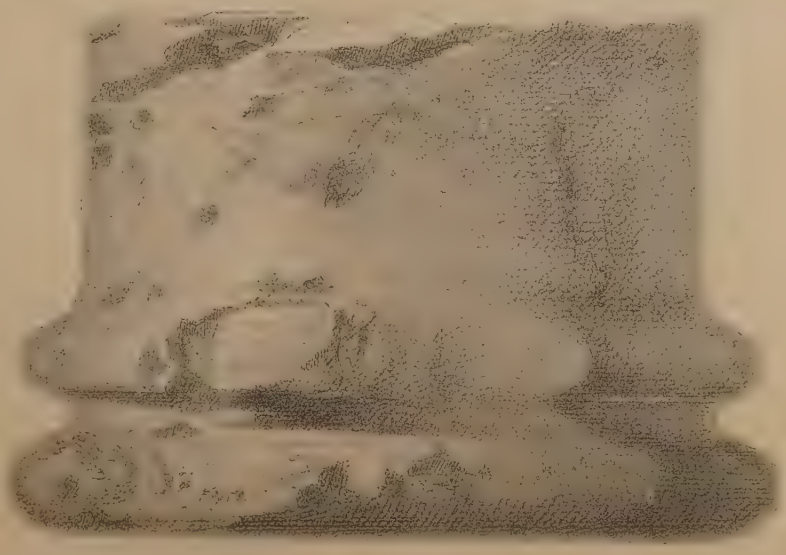



FIG 2.

FIG. 3



Scale of 12' 9" 6" 3' 0 1 Foot

George E. Fox. del. 1893

SILCHESTER.—ARCHITECTURAL DETAILS FROM THE BASILICA AND FORUM.

was formed by a large stone[a] having in it a rudely cut semi-circular hole 15 inches high and 17½ inches wide, slightly splayed inwards. The drain coming from the *forum* area and ending in this manner was 2 feet 9 inches square, and formed of massive stones of varying dimensions. From the measurements given it will be seen that it was of considerable capacity. Its depth from the floor of the ambulatory above was 3 feet 5 inches.

Outside the stone with the semi-circular aperture in it the drain was continued down the street running eastwards from the *forum* as a trench in the roadway, roughly 2 feet deep and of the same width. When found this trench was filled with loose stones and rubbish. This seems to point to the fact that the actual drain was of wood, which has long since perished. It was traced, with the street in which it ran, as far as the hedge of the pasture land east of the *forum*. Similar trenches have been noticed running down the middle of other streets, and this is apparently the only system of drainage employed in the city.

Before passing to other matters it may be noted that the base of the column (Plate XXXIX. fig. 14) was found lying loose in the soil, near the head of the stone drain.

Having described the area, the gateways, and the ambulatories of the *forum*, it is necessary now to deal with the ranges of buildings lying between the ambulatories. A reference to the plan (Plate XLI.) will show that these ranges[b] are divided by cross walls into a number of chambers, for the most part rectangular. On the south side, however, are two apsidal chambers alternating with square ones. The eastern of the two has a width of 23 feet 3 inches; the western is a foot broader, and both are 27 feet deep. What were these chambers? From the position they occupy it does not seem likely that they were temples. It is more probable that, with the three square rooms with which they alternate they were used by the governing body of the city as offices of some sort, or courts connected with the *forum*.

A more interesting question is, what were these apsidal chambers like when complete?

To form any clear idea of their original state the method of lighting them must be determined. This once settled, all else will follow.

The fragments of the columns of the ambulatories indicate for them a height of about 15 feet 6 inches, and a definite measurement gives the width of the inner

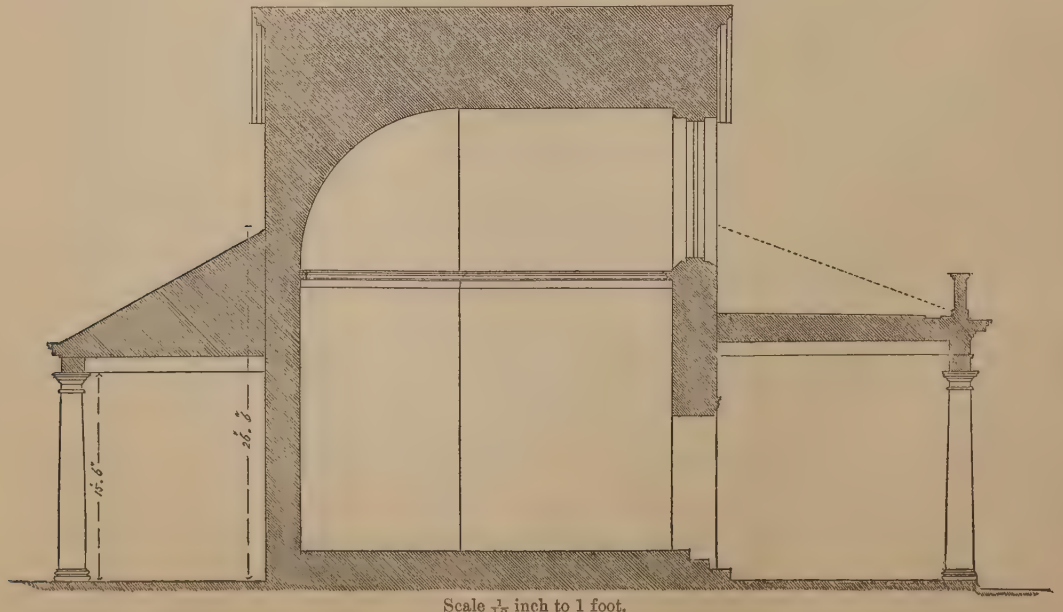
[a] This stone was 3 feet 6 inches wide, 2 feet 9 inches high, and 6 feet 5 inches thick.

[b] These ranges of chambers are 31 feet, 29 feet 6 inches, and 32 feet 6 inches wide on the north, east, and south sides respectively.

ambulatories at 19 feet from the wall to the curbstone of the area, the measurement of the outer ambulatories being somewhat less. So great a width would render it impossible to light the chambers in question in any adequate way from the ambulatory, even supposing that they opened widely upon it. The alternative course therefore suggests itself of their being lighted from above, and the way of doing this has now to be considered.

Taking the height of the ambulatory columns, and adding as much to it as may be necessary for a cornice or entablature and for the slope of the roof, a height of more than 26 feet will be the result, and this before room for window openings can be obtained. If space for these latter be added the ceilings of the chambers would be raised to a height quite disproportionate to their known width and breadth.

Again, a reference to the plan will show that the axes of the chambers in question are perpendicular to the *forum* area, their apses being at the end opposite to that area. The semi-domes of the apses, the height of the roof line of the outer ambulatory, and the abutment of the roof of the adjoining chambers east and west, render it impossible to place windows on any side except the north, and here a sloping roof to the inner ambulatory would be in the way.



Scale $\frac{1}{12}$ inch to 1 foot.

Fig. 1. Diagram showing probable way of lighting the apsidal chambers of the *forum* at Silchester.

Taking all these obstacles into account, it will be found that one course only is open by which they may be overcome, and that is by giving the inner ambulatory a terraced roof. (See section, fig. 1.) The apsidal chambers would then present gables to the *forum* with, possibly, semi-circular windows in them following the line of the vaults, for it is presumed that the chambers would be vaulted. The alternating rectangular rooms were roofed in a line parallel to the ambulatories, and would be lighted by square openings looking upon the terraced roof of the inner ambulatory. They would probably be filled with wooden frames to contain the glazing, after the usual fashion, certainly for important buildings during the Romano-British period. It has been thought advisable to go into some detail on the question of lighting as it is one having an important bearing on a large class of buildings in Britain from the first to the fifth century.

The ranges of building constituting the north and east sides of the *forum*, with some exceptions, are cut up into spaces nearly square in form, the largest of which measures 22 feet 9 inches by 24 feet 10 inches. It is quite possible that these were shops.[a] Their discoverer, Mr. Joyce, not only called them so, but endeavoured to identify the trade carried on in each by the objects dug up in them.

Without going as far as this, but granting the probability of these enclosures being shops, the difficulty of lighting them, as with the offices or courts, again arises. This difficulty is not, however, so great as on the south side, for it is quite probable that the shops fronted both ambulatories, and thus had a through light. The shops at the north-east and south-east corners could, according to the plan, only open on the outer ambulatory.

It is conceivable that there was an upper story throughout to serve for storage or dwelling-places to the proprietors. The rooms in this story would be lit by grated and shuttered openings looking on to the terraced roof of the inner ambulatory, and access to them would be obtained by wooden stairs from the shops below. The shop fronts in the ambulatories possibly generally resembled the well-known examples in Pompeii and Rome; but from existing indications were perhaps more of the same character as the shops to be seen in the ruins of the little *forum* of the Montenegrin town of Doclea,[b] with masonry counters ranging in the same line with the general face of the ambulatories, and showing at one end a narrow gap for entrance.

[a] From the few hitherto found in the city, it might be conjectured that the *forum* would be well supplied with shops, more so than in towns where they constitute a more marked feature than they do at Calleva.

[b] See a paper by M. Ch. Buls, in *Annales de la Société d'Archéologie de Bruxelles*, v. 189-192.

It should be noted that the walls of all three ranges of buildings were of flint rubble bonded with brick, and varying in thickness from 2 feet 3 inches to 3 feet 7 inches. They were quite capable of sustaining an upper story, as well as the heavy roof, which was covered either by large Roman tiles or hexagonal stone slabs. The roofs in all probability, on all three sides, showed a continuous ridge, broken only by the gateways and the gables of the apsidal chambers, and coinciding in height with the aisle roof of the *basilica*, against which they abutted at its north and south ends.

In the centre of the northern range one of the square chambers is divided by a cross wall, and has a recess in the west wall of each division. The northern recess was 5 feet wide and 2 feet 5 inches deep; the southern, 6 feet 5 inches wide, with the same depth as the other.

The next compartment to the west of this is more than half filled by an apse 15 feet 4 inches deep and 23 feet wide, opening on the inner ambulatory. The foundation wall crossing this opening is of sufficient width to have supported columns, as large as those of the colonnades, to uphold the architrave bridging the opening. This apse, if it was roofed by a semi-dome, may have been lighted from above, much in the same manner as the two apsidal chambers on the opposite side. It may, however, have been covered by a flat ceiling, but if so the arrangement would have been both ugly and dark. If the apse contained a statue, as is quite possible, a light from the top would have been a necessity. Perhaps we may look on this structure as an *exedra* due to the munificence of some prominent citizen or patron of the city.

Three more spaces yet demand description. Two abutting on the *basilica* at the ends of the north and south wings; one next the vestibule between the great entrance gateways. The former have much the appearanc of subsidiary entrances to the *forum*. The doors to the *basilica* are situated at this end of the inner ambulatories, and these passages would serve as a ready means of access to either *basilica* or *forum* from the outside. The southern passage measures 26 feet 9 inches in length by 17 feet 4 inches in breadth, and has traces of the jambs of a doorway in its south wall. The northern passage is 1 foot 9 inches less in length and breadth than its fellow. A roadway led up to it from the main street on the north.

The last space remaining to be mentioned is that north of the vestibule between the main gateways on the east side. This has a length of 23 feet with a breadth of 7 feet 7 inches. From its proximity to the main entrance, and the great drain beneath it, it was at one time thought to have contained the latrines

of the *forum*, but excavations showed no signs of such use. If the inner ambulatory had a terraced roof, the stairs to it might with much likelihood be placed at this spot.

Having now completed the examination of the *forum*, it is time to take up the subject of the *basilica* attached to it.

This great building lies north and south, and occupies the whole width of the *forum*. Its eastern wall bounded the *forum* area; its western was lined by a range of chambers and halls, which were limited by the return of the outer ambulatory, that here borders the great street running from the north to the south gate of the city.

The *basilica* had the form of a long rectangular hall, 233 feet 6 inches in length by 58 feet in width. At each end was a semi-circular apse, 27 feet 9 inches wide by 18 feet 2 inches deep. The total internal length of the edifice amounted therefore to 269 feet 10 inches.

In the centre of the western side was another apse, 38 feet wide, segmental in form, and with its ends prolonged so as to give a depth of 33 feet 3 inches. It must have formed a quasi-transept. The floor of this apse is raised 2 feet 7 inches above that of the main hall, and access was obtained to it by a flight of three steps, originally extending the whole width of the opening. Some stones of this flight still remain, but have slipped forward on their foundations. The apses north and south had also raised floors at a level of 2 feet 5 inches above the main pavement. Instead, however, of being entered by the same arrangement of steps as in the central apse, the floors were carried forward as rectangular projections, making an addition of 5 feet 3 inches to the depth of each apse, and extending nearly its full width. These projections were supported by low walls 2 feet thick, doubtless supporting open balustrades or *cancelli*, and having at the ends steps giving access to the raised floors.

The fabric of the *basilica* and its dependencies is of two dates. The discoveries of Mr. Joyce established the fact that this great hall with its annexes had been burnt down at some period during the Roman rule impossible now to determine, but probably a late one. It seems, however, that the rebuilding was on the former lines, and that with the exception of alterations within the main walls of the *basilica*, the original plan was not departed from. Examination showed that the rubble masonry above the concrete foundations of the whole western range was of very poor character, not to be compared with that of the north or south apses, or the east wall of the *basilica*, which are all evidently parts of the older work. Fragments of this older work were also visible on the western

side. In the excavations made here a solid concrete foundation was come upon exactly similar to that found under the wall of the eastern side, where the masonry is of the older date, thus proving the reconstruction on the old lines.

The concrete foundation, which is in every instance of the same composition, in one place, at the south-west angle of the *basilica*, exhibited the impress of the first tile course on which the walls were erected. Like all the other buildings of the city, the walls consisted of flint rubble with bonding and lacing courses of tiles. The great east wall of the *basilica* had a thickness, at the floor level, of 5 feet, and was the most substantial and thickest piece of masonry on the site, probably on account of its unbuttressed length. The corresponding west wall was less in thickness, possibly from its having the abutment of the partition walls of the various chambers on this side.

These chambers must now be described. The western apse of the *basilica* occurs exactly in the centre of the range. The two divisions north and south of it are respectively 30 feet and 28 feet wide, being nearly square. The second and third on the south side are unequal in width, the most southern being the smaller. In this chamber was found the bronze eagle, probably rightly supposed by Mr. Joyce to have been a legionary one.[a]

The most northern division was a fine hall 61 feet 7 inches long, which may have been used as a corn exchange or market of some kind, with its entrances from the main street through the western ambulatory. All the chambers here noted have the same breadth east and west, viz. 29 feet 6 in.

To return to the *basilica*. It is to be presumed that this great hall was covered by a wooden roof, as its walls were not calculated to sustain a vault. But a space of 58 feet, the width between the walls, would scarcely have been bridged by one roof at the period in which this building was erected. The problem to be solved is, therefore, what has been the internal arrangement of this great area. It is evident what that arrangement was in the second period of the building's existence, but less so in the first. The usual plan of a central nave, divided by colonnades from aisles on each side, is indicated by the position of the apses at each end, and excavations were undertaken to see if proofs of such a plan could be obtained. Such proofs would mainly consist in finding the remains of the sleeper walls of the colonnades.

With this end in view a first trench was dug close against the north wall. It revealed a solid platform of rubble 5 feet wide, close to that wall and on both

[a] See *Archaeologia* XLVI. 364.

sides of the apse. The western mass had no great depth and may have been part of the layers of a floor, but the corresponding one on the east went deep down. In these masses nothing could be detailed on either side of the apse to indicate the starting points of the foundation walls of the presumed colonnades. Three other trenches at intervals along the west side showed nothing, but a fourth, at a spot south of the centre, afforded better results, as a fragment of the wall could be traced.

A trench was then cut at the foot of the south wall, and here something definite was obtained. Masses of flint rubble appeared of much the same proportions as at the northern end, but a ragged projection of the western mass revealed the starting point of the sleeper wall on that side. At the same time, in the angle formed by this projection with the face of the rubble mentioned was a long groove showing where the setting-out stake for this wall had been planted. This groove was 9 feet 9 inches from the western wall and proved that the foundation of the colonnade started exactly from the springing point of the apse, as was to be expected.[a]

No traces of the corresponding sleeper wall of the eastern colonnade could be found, but as the foundation wall for the colonnade or arcade of the later building lay close to its presumed position, it may have been destroyed when this latter was constructed.

Besides the evidence obtained by these excavations, and the inference to be drawn, from the position of the apses in the centre of each end, that this *basilica* had double colonnades, the corroborative facts may be cited, that in two important instances in this country this arrangement prevailed. The sleeper walls of similar colonnades exist in the *basilica* of *Uriconium* (Wroxeter); and in a like building discovered at Chester in 1863-4, a number of the bases of a double colonnade could be easily traced, some of which were *in situ*.

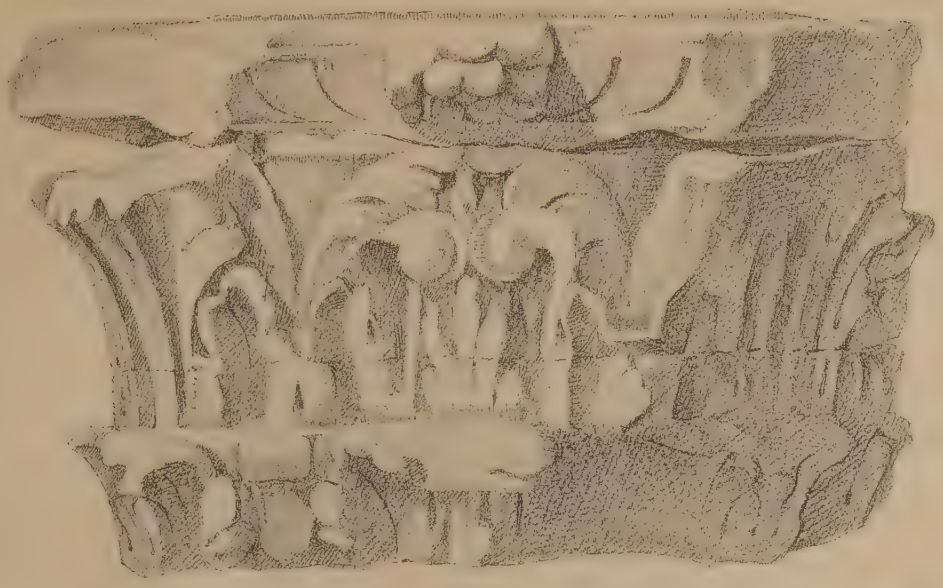
Taking it therefore for granted that the *basilica* of *Calleva* as first erected had a nave and aisles, the next task is to ascertain what, if any, remains exist of the superstructure, and what deductions may be drawn from them. Unhappily these are but scanty. They may have been more abundant when the site was first excavated, but in the space of five-and-twenty years exposure to the weather has

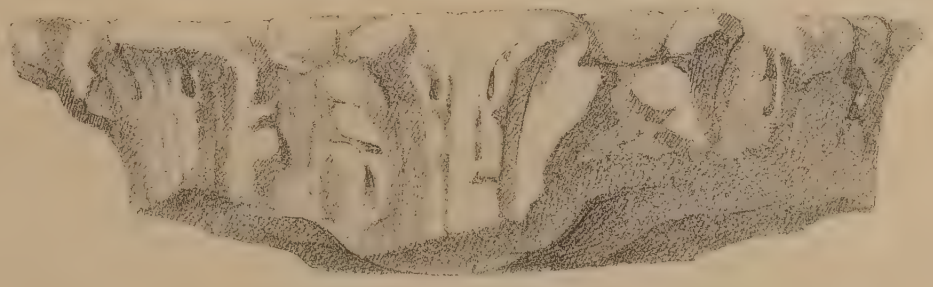
[a] Traces of other setting-out points were found not far from this spot, one against the inner face of the south wall of the *basilica* at a point 19 feet west of its south-east angle, and another at the north-west angle of the passageway adjoining the *basilica*, in the southern range of buildings of the *forum*.

reduced many to shapeless masses from which no information can be drawn. Scattered, however, here and there within the area of the *basilica* were various fragments of shafts and bases and capitals, which from their size can only have been portions of the columns of the colonnades. From among these have been collected part of the lower and upper drums and pieces of the torus mouldings of

Fig. 2. Conjectural restoration of a capital from the colonnades of the *basilica* at Silchester.
($\frac{1}{9}$ linear or 1 inch = 9 inches.)

the base of one column. The lower drum shows a diameter of 2 feet 10 inches. The remains of a fine Corinthian capital unearthed in 1867 from this spot (Plate XXXVIII.), which after much exposure had found a resting place in the little museum on the site, added to the fragments mentioned, allow of a fairly





SIDE

VOLUTE

FRONT

Scale of 12" 9" 6" 3" 0 1 Foot.

George E. Fox. del. 1893

SILCHESTER.—CAPITAL FROM THE BASILICA.

correct estimate being made of the height of the columns of the colonnades to which they all belonged. That height may be taken with some degree of certainty at 27 feet. If to this be added an entablature such as would have been supported by these columns, a height of 33 feet 9 inches is obtained. Again, in all likelihood the entablature would be carried round both the north and south apses, and if, as was most probably the case, the apses were covered with semi-domes, their altitude must be added to the previous measurements, thus making in all 47 feet. This height would not allow of sufficient wall space above the colonnades for windows, for it was only by means of a row of windows on each side, in fact a clerestory, that such a building could be effectively lighted. It follows then that the walls above the colonnades must have been raised sufficiently to meet this necessity. Taking all these measurements together, the nave of the *basilica*, from the floor to the tie-beams of its roof, which roof probably was hidden by a coffered ceiling, would have reached a height of about 57 feet. This would have been within 2 or 3 feet of twice the width of the nave. It may be mentioned, that the proportions of the width of the nave to the aisles is roughly that given for *basilicæ* by Vitruvius.

Another point, as important as any of the preceding, should be noticed, viz., the relation of the central apse to the body of the *basilica*. There can be no doubt that it opened in its full extent, certainly in the later period, upon the area, and must have been lighted from it, the surrounding buildings preventing its illumination in any other way, If this was the case, it seems almost impossible to avoid the conclusion that a transept formed by the interruption of the aisles and colonnades was formed in the centre of the building. The advantages of such an arrangement are obvious. By it a flood of light could be admitted to the great apse from large windows in the opposite wall, and the floor space enlarged at a point where it would be much required.

It is clear, too, from the position of its three apses, that the building was never devoted to one purpose only. Each of the smaller apses, with a portion of the nave and aisles screened off in front of it, may have served the purpose of a court of justice; the central one, with a screen on the top line of its steps of ascent, as a *curia* for the governing body of the city, and the space in front of it, formed by the transept and part of the nave, as a place of assembly of the citizens on occasions of political importance. The position of the doors of the *basilica* tend further to strengthen this conjecture, as they are situated at the ends of the inner ambulatories of the *forum*, and open into the eastern aisle of the *basilica* at a short distance from the north and south apses. There is no doubt of

their position, for although the southern one can scarcely be traced, a portion of the threshold of the northern one still remains in place.

Thus far the *basilica* and its annexes, in their earlier state, have been under consideration. Their later one must now claim our attention.

It is impossible to say at what period the partial destruction of this great mass of buildings took place; but, judging from the badness of the masonry in the reconstruction, and the clumsy planning of the single re-erected colonnade or arcade, the reconstruction must have taken place at a comparatively late period of the Roman rule.

The halls and chambers on the western side appear to have arisen again on the old foundations; but the interior of the *basilica* received considerable modification. The western colonnade was not rebuilt. Its sleeper wall even seems to have been rooted up. The eastern colonnade shared the same fate. Then after this clean sweep of all the internal arrangements, the foundation wall, 4 feet 6 inches wide, of a new colonnade or arcade was laid on the eastern side at a distance of 15 feet 2 inches from the east wall. On this was erected the new colonnade, which was in all probability composed of such columns of the old building as may have escaped destruction, and thus the width of the *basilica* was redivided into one wide nave with a single aisle on its eastern side. The sleeper wall of this later colonnade yet exists unbroken in its entire length, and lying bedded upon it, near the south end, is a solitary stone, the only one left of the long line that formed a solid continuous base for the columns to stand upon. The upper surface of this slab gives the floor-level of the altered *basilica*.

It will be seen by a reference to the plan (Plate XLI.) that the re-constructed colonnade encroaches upon the eastern curve of both north and south apses. To meet this difficulty the northern apse, and probably the southern one also, was rebuilt, but in rectangular form and smaller. The foundations on the north show a width of 23 feet 9 inches by a depth of 18 feet 9 inches. The floor remained at the raised level and the rectangular projection in front was rebuilt but shortened in its length to work in with the altered plan. The triple division of the area appears to have been maintained.

There can be little doubt that the materials, as far as they were sound, of the older structure, were re-used in the new building. All the fragments of capitals found on the site, except one perhaps, belonged to the earlier building, for their freely carved leafage is far superior to any foliage that could have been executed, say in the time of Constantine or later. It is possible that not all the capitals required for the new work were forthcoming, as a fragment of one looking like

a clumsy copy of the older examples lay in the farmyard, where it served as a horse block until rescued from that service. (Plate XXXVII. fig. 1.)

Did the re-erected columns of the *basilica* support arches or architraves? If the rebuilding took place at a late period, it may be that the former were adopted. A hint that buildings thus constructed may have existed in Britain is given by a rude relief found at Maryport, in Cumberland, and figured in the *Lapidarium Septentrionale*.[a]

Arched construction had many advantages. The columns could be spaced more widely and their height also reduced without lowering the required height of the building. The long lines of mouldings in architraves and cornices could be dispensed with, and what architectural divisions in the way of the latter were needed could be run in stucco on cores of brick, a method for which early precedent was forthcoming.[b] It may be that the builders of the restored *basilica* of *Calleva* acted on these reasons, and their doing so may partly account for the paucity of moulded stonework discovered in its remains.

As in the earlier so in the later building, a clerestory probably was the means adopted for lighting it, nor can there be much doubt as to the way in which the window openings were filled in either case.

The delicate framed lattice work of the earlier time, comparable in effect to medieval tracery, had given place to framed boarding pieced with circles or other patterns. In both cases the openings were unglazed.[c] The roof was probably of the simplest construction capable of bridging the enlarged nave, and with timbers unconcealed by the coffered work of an earlier date.

It has been supposed that the *basilica* had galleries, but it is extremely doubtful if in either its earlier or later state this was the case. There are no traces of staircases in any part, and more than one would have been requisite. If to a colonnade supporting the roof of such galleries be added a clerestory which would still be needed to give a proper amount of light, a height altogether disproportionate to the breadth of the nave would have been the result.

The preceding account would be incomplete if such facts were not added as bear on what may be called the adornment of the building.

[a] P. 452, No. 901.

[b] See for a notice of examples of this kind of work on various buildings in Rome, *Ancient Rome in 1885*, by J. H. Middleton, first edition, chap. xii. p. 403.

[c] An interesting example of the continuation of this latter mode of filling window openings may be found in William of Malmesbury's account of the church erected by Paulinus at York in the earlier half of the seventh century.

The *basilica* of *Uriconium* (Wroxeter) had the floors of its aisles laid with panels of coarse mosaic, the nave being paved with small bricks in herring-bone fashion, the well-known *opus spicatum*. Mr. Joyce, in his excavations, does not appear to have met with any mosaic in the area of the *basilica*, he only mentions a concrete floor, which may have been a bed for such paving as that of which a small portion still remains in place towards the northern end. This consists simply of plain square red tiles evidently of the latest work. The northern apse was floored with the usual red tile *tesseræ* 1 inch square, some of which were turned up in our excavations. The same sort of flooring formed the paving of the great hall at the north end of the *basilica* and that of the central apse. Patches of it are still to be seen in both places. The chamber south of the central apse may have had a floor of *opus signinum*. In the southern apse, at the time of its discovery, fragments of plain mosaic of fine white stone *tesseræ* were found by Mr. Joyce, the remains, no doubt, of the floor of the earlier tribune.

More noteworthy than these floors were the traces of marble wall linings. To quote the words of their discoverer, "the fronts of the tribunals," *i.e.* of the north and south apses, "were faced by slabs of polished Purbeck marble, secured in place by small iron clamps, and in all probability bearing inscriptions. Some small pieces of this polished Purbeck marble remained fixed against the vertical face of the tribunal at the south end, the iron clamps when first exposed retaining their hold."[a] And again, speaking of the central apse, he says, "There were found within it small pieces of fine white marble sawn in thin slabs, imported from the Continent, which formed a *dado* or facing to the apse. The iron clamps also by which the corners of such slabs had been secured were likewise discovered."[b]

A fragment of white marble was preserved in the little museum on the site, together with parts of a thin band, $2\frac{3}{4}$ inches wide, of Purbeck marble, which showed from their having been mitred that they were relics of a border to some rectangular slab. Both the Purbeck and the white marble were of the same thickness, viz., $\frac{7}{16}$ inch. With them were preserved also the iron clamps mentioned. These were four-pointed stars or crosses of iron varying in size. Of the most perfect that have been preserved, one measured from point to point $6\frac{3}{4}$ inches, another 6 inches. In the smaller example the limbs or rays tapered considerably in width from base to end, but very little in the larger. The centre of each was pierced by a hole, through which the nail was driven to fasten it. These stars were apparently flat on both sides.

So rude are they that it is difficult to believe that they could have served for

[a] *Archaeologia*, XLVI. 359. [b] *Ib.* 361-2.

the purpose mentioned by Mr. Joyce, and as he does not say that they were found in place, it seems more probable that they had served for some other purpose than as fastenings of the marble wall lining. He makes no mention of the form of those holding the Purbeck marble slabs of the south tribune, which were actually found in position. Unfortunately no representation apparently exists of what must have been an interesting fragment of constructed decoration.

Portions of Purbeck marble mouldings preserved in the little museum seem to have come from the same spot, as similar pieces were dug up there in 1890. These no doubt were a part of the base and other mouldings of the south tribune. They are rudely worked, and evidently belong to the later state of the *basilica*. (Plate XXXIX. figs. 9, 10, 11.)

Besides the marbles mentioned by Mr. Joyce, it is conceivable that the fragments of green and white marble, possibly from the Pyrenees, found in *Insulæ* I. and II., were pieces broken from slabs with which the apses of the *basilica* were adorned. Relics from this edifice and from the *forum* are sown broadcast over the site, and have been discovered even at the gates of the city.

All the fragments of marble and the clamps spoken of have now been deposited in the collection at Reading.

Colour was certainly largely used upon the walls of the *basilica* and its annexes. In excavations made in 1890 around the northern apse, a considerable quantity of painted wall plaster was dug up. In the many specimens then turned over, the preponderance of plain light red and ochreous yellow grounds was marked, and after these colours, of white. Fragments of yellow and green painted draperies also occurred, and some of a drab uncoloured plaster with pinkish white lines upon it. At the same time the hollow angles of the central apse yielded other examples of painted plaster. In these there was a preponderance of plain pale salmon red and pale blue grounds, and next in quantity of green. These finds indicate clearly enough that at both these points of the building the effect of the marble decoration was supplemented and heightened by the use of a considerable body of colour.

With these remarks the relation of our researches made to elucidate the structure of both *forum* and *basilica* may be brought to an end, although a few more words of description must be added as to the objects found in the latter.

In 1890, in excavations carried on about the northern apse of the *basilica*, there was found, lying just beneath the turf which covered the floor, a fragment of bronze of somewhat interesting character. It is part of a flat band, 6 inches

long, showing at its upper end, where it has been broken, a decided forward curve. At the lower end, which is rounded, between broad flat fillets bordering the band, is a lion's head in relief, of good workmanship, having beneath it two scrolls with a flower between them. A small hole over the right-hand scroll and beneath the lion's mane seems to be accidental and not for fastening the band to anything. The width of the band, including the bordering fillets, is from $2\frac{3}{4}$ inches to $2\frac{1}{2}$ inches, and the thickness of the ground between them, on which is the lion's head, is $\frac{1}{8}$ inch.

Another object, also of bronze, was found the following year in clearing away a mass of stones and rubbish at the south end of the *basilica*. This is a portion of the Corinthian capital of a small pilaster. It is 3 inches high, and must originally have been $7\frac{3}{4}$ inches wide at the upper part, from volute to volute. The abacus consists of a small fillet with an ovolo moulding beneath it. The body of the capital is formed by two rows of leaves, the upper being the larger, and having two leaves only between the volutes. The lower row has three leaves of rounded form with central veins, and was terminated by an acanthus leaf at each end, only one of which remains. Beneath this row is a little roll moulding and fillet.

What gives a peculiar interest to the fragment, however, is that it has received in part if not wholly a thin plating of silver or white metal, the two upper leaves between the volutes being still covered by this plating, and a trace of it being also visible on the lower mouldings. The bronze has an average thickness of $\frac{1}{8}$-inch. From the flatness of treatment in the composition, and its decorative character, it looks as if this capital might have been applied to some object, in fact the form of both these bronze fragments rather suggest their employment as part of the ornamentation of some seat of state, kept in the *basilica*, which perished in its destruction.

An antique relief representing a throne, now preserved in the church of San Vitale at Ravenna, suggests the manner in which metal work of this description might be applied for purposes of decoration.

Amongst the various fragments of stonework scattered over the area of the *basilica*, part of the base of an altar or pedestal may be noted. It still lies near the northern doorway. Exposure to the weather has reduced it to a wreck, and it has not therefore been included with the other fragments in the collection at Reading. (Plate XXXIX. fig. 4.) The same may be said of a large stone lying near it showing a sinking in its face for the insertion of some tablet.

Mr. Joyce records the discovery "close to the steps forming the ascent to the *curia*," the central apse of the *basilica*, of part of a colossal head, broken in two,

SILCHESTER.—SECTIONS OF MOULDINGS AND ARCHITECTURAL REMAINS FROM THE BASILICA AND FORUM.

*¼ linear.*

of which only the brow and some locks of hair above it remained.[a] He considered that it belonged to the statue of some emperor, but a careful examination seems to show that it appertained to a female figure wearing a mural crown. Other pieces of what may have been the same statue, exibiting lines of drapery, were recovered last year. All the pieces show that the statue had been broken in ancient times and afterwards carefully riveted together again. From the character of the work the statue might well have belonged to the earlier *basilica*, and, although injured in the destruction of the building, have been recovered from the ruins and pieced together again.

From the size of the figure and from the mural crown, may we not see in these scanty relics the remains of a statue of the Genius of the city? What more likely or fitting place for such a statue than the council chamber of the city which that Genius was expected to guard and with whose existence she was identified.

EXPLANATION OF SECTIONS OF MOULDINGS ON PLATE XXXIX.

From the *Basilica*.

Fig. 1. Base of a column; diameter of shaft 23½ inches.
Fig. 2. Perhaps the cornice of a pedestal.
Fig. 3. Part of a base.
Fig. 4. Base of a pedestal; side of the die 22⅜ inches.
Fig. 5. Fragment of a large base.
Figs. 6, 7, 8. Fragments of the base of a large column.
Figs. 9, 10, 11. Details in Purbeck marble.

From the *Forum*.

Fig. 12. Base of a column.
Fig. 13. Base from outer colonnade
Fig. 14. Fragment of a base found near the drain.
Fig. 15. Fragment of base from the rubbish of the sleeper wall of the inner colonnade.
Fig. 16. Fragment of the astragal of a large column.
Fig. 17, 18. Parts of capitals found in *Insula* IV.

[a] *Archaeological Journal*, xxx. 24.

## THE SURROUNDINGS OF THE *BASILICA* AND *FORUM*.

*By* W. H. St. John Hope, *M.A.*

It has already been explained that the *basilica* and *forum* abut on the west side upon the main street connecting the north and south gates, and that on the north, east, and south sides they are surrounded by a broad belt of hitherto unexcavated ground. It has now been ascertained, despite the difficulty caused by the huge spoil banks which surround the great central block of buildings, that besides the main street on the west side, the *basilica* and *forum* were completely isolated by other streets, about 27 feet wide, on the north, east, and south; those on the north and south being also extended eastward to meet the street bounding the *insula* on that side. The strips of land thus cut off were subdivided by other streets: that on the north at about one-third of its length by a street leading direct to the north entrance into the *forum*; that on the east in the middle of its length by a main street leading apparently direct from the east gate to the *forum*; while that on the south seems to have had a similar division to that on the north, though not so distinctly marked. It is quite possible that both the north and south strips had a second street further east, and so were divided into three sections each of nearly equal size.

The first section of the north strip was entirely occupied by a large house, arranged as usual round three sides of a square which faced northwards. The western wing contained a hypocaust, but has been almost entirely destroyed, as has the corridor forming the south side. The eastern wing contained at least two sets of chambers, but as little else is left than the foundations, it is difficult to say anything about them. The courtyard contained several interesting features. A little to the north of its centre was uncovered a small oval hearth or furnace, close to which was a layer of burnt earth that yielded a number of pots; further west was a well, which, like most of those found at Silchester, had been lined with wood, and near the corridor on the south were patches of concrete paving that may represent some destroyed chamber or chambers. From a pit (c) 22 feet deep that lay under the west side of the eastern wing of this house were recovered the fragments of a large globular amphora. The neck and handles of this had at some time been broken off, and the opening ground down to make a new lip.

The traces of buildings in the long strip forming the rest of the north side are

very scanty. A few lumps of ironstone on the northern edge, and two broken lines of similar lumps at right angles to the street certainly represent walls, but it is impossible to ascertain the plan or extent of the building to which they belonged. At the north-east corner are the foundations of a building or enclosure 50 feet long and about 27 feet wide. But though this strip yielded few traces of buildings, it was simply riddled with pits, besides containing two more wells. The pits were no fewer than thirty-one in number, and from them have been obtained the larger proportion of the earthenware vessels found last year, as well as some interesting miscellaneous objects. Among the latter was a small bronze figure, perhaps of an infant Hercules, and a bowl of the same metal; part of an antefix with a rudely executed face (fig. 3), which evidently belonged to a small building of some importance; and an iron screw wrought with a thread and ending in a point in the same way as a recent well-known patent. There seems to be no doubt as to the Roman origin of this screw, since it was found at a depth of 6 feet in the same pit which yielded at a higher level the little bronze Hercules and many fragments of pottery. From one of the two wells was obtained a bronze handle, two perfect and three other pots, a lead weight and a steelyard weight. A point of interest arises with respect to these two pots which were found together. One is hand-made and composed of the rude paste filled with grains of calcined flint. The other is wheel-made and of good form, but of similar paste to the ruder one. This vase shows signs of having been mended, two holes in it being stopped with some composition.

Fig. 3. Part of an antefix found in *Insula* IV. ½ linear.

From another pit as many as thirty-nine necks of flasks or bottles of various sizes were recovered.

Among the architectural fragments found on this side may be noted three pieces of Purbeck marble, which, although met with in different places and at considerable intervals of time, all fit together and form part of a large slab with moulded edge. If this slab bore an inscription, it is unfortunate that no traces of the lettering remain on the portions recovered.

The northern of the two sections of the eastern strip had at its upper end the foundations of a small oblong house, which apparently contained four shops, one at each corner, with a room between. South of this appeared traces of other buildings, but with the exception of part of a tiled floor they were of very indefinite character.

The southern section not only contained no buildings, but the trenches brought to light no important objects of any kind, except one charming little bronze figure representing a winged and seated Victory or Genius holding up her dress on her lap as if to receive gifts or offerings.

The centre of this side of the *insula* is underlaid by an extensive bed of oyster shells, from 18 inches to 2 feet thick. This bed is 50 or 60 feet wide, and extends eastward from near the *forum* entrance for at least 100 feet. The streets at this point are laid upon it.

That so extensive a deposit cannot have been accumulated as refuse seems to be proved by the entire absence of pottery or other foreign substances, and since it is unquestionably artificial and not a fossil oyster bed, it ought to be possible to suggest a reason for its presence here. Looking to the fact of the streets being laid upon it and its consequent early date, and also its near proximity to the great mass of buildings forming the *basilica* and *forum*, may we not see in this layer of oyster shells the remains of a still larger deposit brought here for conversion into lime? Although it does not seem to have been the usual practice among the Romans to calcine oyster shells for this purpose, such an operation would yield a very pure lime; and it is quite possible that since the white marble used for fine stucco or plaster work could not be obtained in Britain, the fine lime from oyster shells was used in its place. This adaptability of the Romans to the resources of the country in which they found themselves is so well known that the substitution of oyster shells for broken marble would be just as likely as their use of Purbeck marble for decorative purposes.

Before leaving the bed of oyster shells, it may be interesting to quote a passage from Mr. Joyce's description of the *forum*.[a] Speaking of one of the shops at the south-east corner, he says: "Here deep in the floor everywhere, outside it in the ambulatory, and extending from it up to the very corner of the exterior wall on that side, is a great bed of oyster shells underneath the level. It is the accumulation one would suppose of many generations of deceased oysters, and must be seen to be fully credited." Mr. Joyce deduced from this deposit that the

[a] *Archaeologia*, XLVI. 355.

shop in question "was the favourite luncheon-bar of the *forum*, and the favourite food was oysters." It is, however, clear, from his description, that the bed of oyster shells forms part of that discovered last year, and is too deeply laid to have had any connexion with a shop; it will be noticed that Mr. Joyce does not mention the finding of any pottery or other remains intermingled with the shells.

The excavation of the strip of land south of the *forum* resulted in a discovery which was not only the most important made last year at Silchester, but may fairly be claimed as one of the most interesting yet made in Roman Britain. On the 10th of May, when driving a trench to find the southern boundary of the *insula*, the foundations of a small square chamber were uncovered, and next to it a semi-circular apse with a mosaic floor of good character. These were at first thought to be parts of a large house occupying the corner of the *insula*, but the further removal of the soil soon showed that such a house did not exist, and that the remains uncovered belonged to a small building that was complete in itself (fig. 4). The building stood east and west, and consisted of a central portion $29\frac{1}{4}$ feet long and 10 feet wide, with a semi-circular apse at the west end. North and south of this were two narrow aisles only 5 feet wide, terminating westwards in somewhat wider chambers or quasi-transepts; the northern of these was the chamber first discovered, and was cut off from the aisle by a thin partition wall. The eastern end of the building was covered by a porch, 24 feet 3 inches long and 6 feet 9 inches deep, extending the whole width of the three main divisions. The total external length was exactly 42 feet. The walls average 2 feet in thickness, and were built of flint rubble with tile quoins.

The central division retains considerable portions of its floor of coarse red-tile 1-inch *tesseræ*, with, just in front of the apse, a panel 5 feet square of finer mosaic (Plate XL.) formed of $\frac{1}{2}$ inch *tesseræ*. The design of this panel consists mainly of (1) four squares filled with black and white checkers, of which the grounds are counterchanged. Outside this is (2) a broad border of white edged with black and filled with lozenges made alternately of *tesseræ* of red tile and Purbeck marble; and beyond this again is (3) an edging of white. The black *tesseræ* are principally of lias limestone, but some of them appear to be mere shale; the white *tesseræ* are composed of white lias and clunch. At the north end of the porch part of its pavement of 1-inch red *tesseræ* remained, somewhat blackened by burning. In the other portions of the building no traces whatever of the flooring could be found.

About 11 feet eastwards of the building, and in line with its axis, is a foundation 3 feet 11 inches square, built of tiles, on the east side of which is a small shallow pit lined with flints. Around the tile foundation are the remains of a rough pavement of flints.

About 20 feet west of the building, and also in line with its axis, is a well, of which the lower portion retains its wood lining. The filling up of this well consisted chiefly of large flints, with some pieces of good *opus signinum*

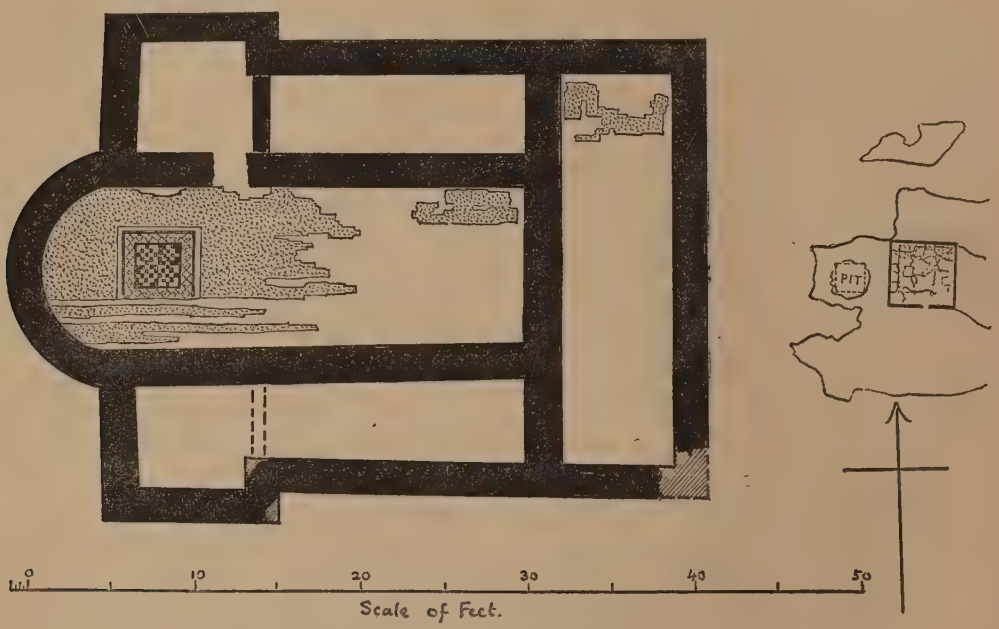



Fig. 4. Plan of church in south-east corner of *Insula* IV.

flooring, evidently the material of some building of which no other traces have been met with. Some distance from the top of the well three coins of Victorinus occurred, and near the bottom were found two small pewter cups of conical form.

From its possessing a nave and aisles and an apse, the building resembles to some extent the *basilica* not far off, but its small size precludes the idea that it

George E. Fox. del.

could have been put to any of the uses for which the *basilica* served. Moreover, its plan negatives the supposition that it was a domestic building, and equally so that it could have been a temple of any kind.

From a comparison of the plan and surroundings of the building with those of a similar character in Italy and other parts of the Roman empire, there seems to be little, if any, doubt that we have here a small church of the basilican type.

Despite its small size, to which reference will be made presently, the complete correspondence of all its parts with those of known churches of early date, preclude this building from having been raised for any other purpose.

Centuries of ploughing have wrought such havoc with the walls that only in the apse and in the north chamber does anything remain above the floor level, and here only to a height of some inches. Owing to the slope of the ground the rest of the walls are reduced to mere foundations. It is therefore somewhat difficult to say with certainty what were the arrangements of the building. It is very likely that the west end of the south aisle was cut off by a screen or party wall like that on the north, and there can be little doubt that the aisles were divided from the central portion or nave by piers and arches. The projecting chambers, or quasi-transepts at the west end of the aisles, seem not to have been altogether open to the central division, as there are traces on the north side of a doorway into the chamber there; they were probably shut off by dwarf walls with arched openings over and doors at one end. At the east end of the church were three doors opening into the nave and aisles from the porch or *narthex*, the east side of which was most likely an open colonnade. The church was probably lighted by a clerestory, with perhaps a west window or windows. That the walls were painted internally is proved by the finding of some remains of the coloured plastering, including a few fragments speckled in imitation of marble.

With regard to the uses of the building, there seems every likelihood that the nave and apse were reserved for the clergy, and the aisles for the men and women respectively, lay folk not in full communion being admitted only into the *narthex*. The chambers at the west ends of the aisles were either vestries or places reserved for persons of quality.

The pavements of the church appear to have been at the same level throughout, and as there is no sign of any break or division in the nave pavement, it is not easy to determine precisely the arrangements for the clergy. There can be no reasonable doubt that the altar stood upon the panel of fine mosaic in

front of the apse, and that it was at first a wooden table. Some small patches of pink cement upon the surface of the mosaic seem, however, to show that the wooden altar was replaced at a later time by a more substantial one in stone or marble.

It is generally assumed that in a church planned like this, with the altar at the west end instead of the east, the celebrant stood during mass behind the altar and facing eastwards, this eastward position being the essential thing, and not the position of the altar in the building. The clergy were arranged in a semicircle round the apse, behind the celebrant, and the deacons stood in front and on either side. The choir of singers occupied the western part of the nave.

The state here of the red tessellation of the nave and apse raises, however, some unexpected difficulties. In the first place, there is so little room between the mosaic panel and the apse wall, that there cannot have been any seat here for the clergy. In the next place, the floor of the apse, which extends right up to the wall, not only shows no signs of wear, but the edges of the *tesseræ* are so sharp that it is quite certain they cannot have been walked on for even a very short period. The mosaic panel is also not worn at all. East of the panel, on the other hand, the red *tesseræ* are considerably worn, and those on each side also show signs of wear. The eastern position of the celebrant was so universally the custom of the Church that the floor ought certainly to show traces of wear on the west side of the altar, but this it does not, and the conclusion therefore seems inevitable that the apse floor had been relaid just before the destruction of the building (which is unlikely), or that the *tesseræ* were effectually protected by being constantly covered by a mat or carpet.

It has already been pointed out that to the east of the church is a tile foundation about 4 feet square. This is clearly the place of the *labrum* or laver, in which the faithful used to wash their hands and faces before entering the church, and the shallow pit in front was probably covered by a pierced stone, and served to carry off the waste water. The water itself could be obtained from the well west of the church, to which, as there are no other buildings near, it seems to have belonged.

Of the usual *atrium* or court before the church no definite traces were found. It will be seen, however, on reference to the plan of the *insula* (Plate XLI.), that the church stands almost exactly in the centre of an area about 100 feet wide and perhaps some 130 feet long, bounded by streets on three sides. This area, except

round the laver, where some flint pitching remains, was entirely covered with gravel, and along its south and east sides there was uncovered a curious wide and deep depression. It is very possible that, owing to the small size of the church, it stood, so to speak, within an *atrium*, instead of having one before it, and these depressions may then mark the site of some low range of buildings, every fragment of which has been rooted up.

On the north side of the church, but not parallel to it, was found a narrow trench cut in the gravel; close to its southern edge was a row of holes, about 4 feet 6 inches apart from centre to centre, with flints laid round them as if to steady a row of posts. These were traced for a line of about 60 feet. As the line is parallel to neither the church nor the street, and is at some distance from the latter, it probably belongs to a period long subsequent to Roman times.

It is unfortunate that neither in the building nor its surrounding area was anything found of an architectural character to throw light on its date. Had its foundations been found on any other but a Roman site, the buildings would very probably have been claimed as an early-Saxon church. There can, however, be no question, from its tessellated floor alone, that it is a Roman building, and the design of the mosaic panel, which is similar to one found in the north aisle of the great civil *basilica* of *Uriconium* (Wroxeter), shows that this little church is of early date.

The ecclesiastical character of the building has been questioned by some from the absence of distinctive Christian symbols in the mosaic or elsewhere; but an absence of symbols in the mosaic floor of a church of the earlier half of the fourth century, as this may have been, would not be surprising or unlikely, and would be an additional proof of early date.[a] Moreover, if emblems had been used in the building they would have occurred rather in the form of paintings upon the walls than as figures in a mosaic floor.

Despite the scanty evidence of date, the building of the church may safely be assigned to the period between Constantine's Edict of Toleration, issued in 313, and the official withdrawal of the legions about a century later. From the character and workmanship of the mosaic pavement there may nevertheless be claimed for the church an early rather than a late date.

[a] An example of a Chi-Rho monogram occurs in a mosaic pavement in a villa at Frampton, Dorsetshire, engraved in Lysons's *Reliquiae Britannico Romanae*, vol. i., but the author thinks it probably "was inserted at a later period" than the age of Constantine.

It can hardly be supposed from the small size of this church that it sufficed for all the Christian inhabitants of *Calleva;* it is therefore presumed that others have yet to be found. The late Professor Freeman, remarking on the discovery at Silchester of the remains of the building called the Round Temple, says, "Two circular foundations, one within the other, may be clearly seen. It did flash across the mind for the moment that these might be the foundations of a Christian church, a British Saint Vital; for it must not be forgotten that a city which formed a part of the Empire of Honorius could hardly have been without Christian buildings. The absence of the projecting sanctuary is not absolutely conclusive against the possibility of its Christian use; still, it is perhaps safer to set it down as a pagan building. It must be remembered that, if it were Christian, the outer circle of foundation would be for a wall, and the inner one for columns; in a pagan building it would be the other way." [a] As the excavations to be carried out this year will include the area in which this circular building stands, something more definite as to its uses may then be discovered.

It is to be presumed that in the Christian period of the Roman Empire churches were built in the various cities and towns to meet the growing needs of the newly-recognised Faith. Such an instance may be seen in the Numidian town of Thamugadi. Here was the seat of a bishopric, and in a plan of the town [b] may be seen as many as four Christian churches of the basilican type, three of which were scarcely larger than that discovered at Silchester; the fourth, which was probably the cathedral church, was of considerable size. We have here, possibly, something parallel to Silchester, a parallel which encourages the hope that further Christian churches will be found within the walls of *Calleva*. It is interesting to notice that while the early church at Silchester had its apse to the west, the Thamugadi churches, which are probably later, have their apses to the east. Their ecclesiastical character is also shown by their difference of direction from that of the great civil *basilica*, which stands nearly north and south.

For a long distance west of the church at Silchester the excavations revealed practically nothing. Just beyond the well some fragments of a possible wall enclosing the church on that side occur, but for 130 feet westwards there was only open ground. This seems to have been crossed at its further end by a street leading to the south entrance of the *forum*.

[a] Freeman, *English Towns and Districts* (London, 1883), 163.

[b] See *Bulletin de la Société des Antiquaires de Picardie*, 1890, 2*nd Trimestre*.

Between this street and the main street joining the north and south gates, there was unquestionably a house, but only a few fragments of its floors and hypocausts remain, of so indefinite a character that the plan cannot be recovered.

It will be seen, therefore, that the great *insula* containing the *forum* and *basilica* had also buildings at its four corners, with more or less open ground between them. Two of these open spaces, the southern part of the strip east of the *forum*, and the middle portion on the south, west of the church, appear to have been quite free from buildings. The southern space, which is of considerable area, may well have been the cattle market, and the adjoining external ambulatory of the *forum* would have afforded shelter to the drovers and buyers. The narrower space on the east of the *forum* may have been a place for carts and wagons on market days.

It has already been noted in the beginning of this paper that the excavations on the east side of the large central *insula* were continued as far as the hedge there bounding the pasture land. Besides revealing the lines of the street there, portions of two new *insulæ* were uncovered. These *insulæ* have been numbered V. and VI. Only a very narrow strip of each lies on the west side of the hedge, and it is therefore impossible until the excavations have been continued in the field beyond to say what is the nature or extent of the buildings there.

The upper part of *Insula* V. appears to show portions of a large house occupying the angle, with corridors lining the streets. Behind the north-west corner were the remains of a hypocaust. On the line of the street, close to the west wall of the house, lay a drain running from the corner southwards for at least 120 feet. It was square in section, and formed entirely of large tiles.

Fig 5. Capital of a small column found in *Insula* V. $\frac{1}{6}$ linear.

South of the west corridor is what may be a continuation of the house. In this was found a small capital of a column (fig. 5) singularly Romanesque in its general outline, though evidently of Roman date from its carefully turned necking.

At the lower corner of this *insula* is part of another house, with traces of a corridor running east and west.

The north-west corner of *Insula* VI. contains part of a large house, with corridors lining the street.

Behind the west corridor is a row of four chambers, which once extended further south. These all form part of the older buildings of the city, and run at a different angle from those of more recent date. The fourth chamber has been enlarged westwards to twice its former area, and the destroyed chambers on the south replaced by a range of three large and two small[a] rooms, set forward on the old line of the street. These open into each other by doors. The two end rooms had oblique openings or drains through the back walls and in the southernmost through the end wall also, which seem to show that some trade was here carried on in which water was used. From the discovery just outside these chambers of a number of fragments of thin veneers of Egyptian red porphyry it is possible that a lapidary or marble-worker may have had his workshops here. South of these chambers, in what must have been an enclosed yard, was a pit or well, the bottom of which appears to have been covered by a board pierced with holes. To the south of the yard are fragments of a house, which it is presumed occupied the south-west angle of the *insula*, but only some traces of walls and part of a large hypocaust remained.

Of the remainder of the year's excavations we do not propose to communicate any account to the Society at present, since the areas examined are not complete in themselves, but belong to *insulæ* of considerable size. The strip south of the great central *insula* is, as will be seen from the block-plan (fig. 6), only a part of the *insula* in which stands the well-known circular building. The unexcavated portion of this *insula* has been reserved, together with a strip parallel to it southwards, and here we hope to begin this year's operations in May.

As it is our intention if practicable to continue the excavations after harvest right down to the city wall, an opportunity may occur of partly re-examining the extensive and important building west of the baths, to which they were perhaps attached; and so the account of the drainage of the baths, of the remarkable water-gate in the city wall, and of the land north of the baths will form with the other works one complete and connected record.

As in previous papers already communicated to the Society, it has not been thought necessary to enter into a detailed account of all the very numerous small objects found during the excavations.

A reference to the block plan (fig. 6) will show how much progress has been made in mapping out the town, but as only about 18 acres, or barely one-fifth of

[a] Under the eastern of these were the remains of a hypocaust of the earlier building, which also here terminated southwards.

INSULA I.

STREET

STREET

COURT

WELL

HEARTH

HYPOCAUST

PIT B

PIT C

PIT D

PIT E

PIT A

REMAINS OF HOUSE

STREET

PIT M

PIT N

PIT O

PIT P

PIT Q

PIT F

WELL

PIT L

WELL

PIT K

PIT I

PIT R

PIT V

PIT W

PIT X

PIT G

PIT H

PIT J

PIT S

PIT T

PIT U

PIT Y

PIT Z

PIT AA

PIT BB

PIT CC

PIT DD

PIT EE

PIT FF

PIT GG

PIT HH

PIT II

PIT JJ

LIMITS OF OLD SPOIL BANK NOT REMOVED

STREET

INSULA V.

TRIBUNE

AMBULATORY

AMBULATORY

HALL

STREET

STREET

STREET

PIT A

PIT B

PIT KK

PIT LL

PIT MM

AMBULATORY

CURIA

BASILICA

FORUM

DRAIN

AMBULATORY

STREET

DRAIN

AMBULATORY

AMBULATORY

TRIBUNE

STREET

INSULA VI.

LIMITS OF OLD SPOIL BANK NOT REMOVED

PIT NN

PIT OO

PIT PP

PIT QQ

PIT RR

PIT SS

TRACES OF HOUSE

HYPOCAUST

WELL

BASE OF LAVER

CHURCH

HYP.

STREET

STREET

STREET

STREET

INSULA VII.

NOT EXCAVATED

Scale 0 50 100 150 200 250 300 Feet

SILCHESTER.—PLAN OF INSULA IV.

the 100 acres within the walls, has been excavated, there is still much more to be discovered.

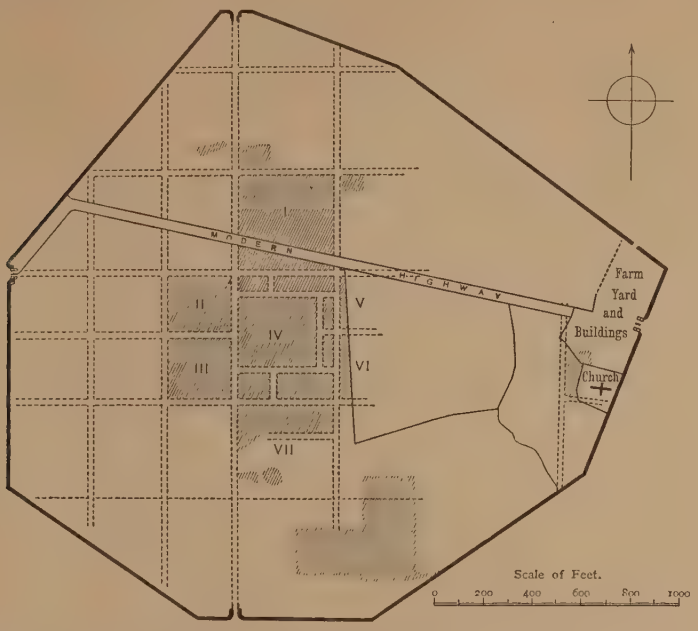



Fig. 6. Block-plan of Silchester, showing portions already excavated up to November, 1892.

It only remains to add that the whole of the antiquities already found at Silchester have been most generously deposited on loan by the Duke of Wellington in a special section of the Reading Museum, where they have been excellently arranged by the curator, Dr. Stevens. The architectural remains are well placed in a room by themselves, where the models and casts belonging to the Excavation Fund are also deposited, and already form a very important feature. In fact, as a group of antiquities of one special period and from one particular place, the Silchester Collection at Reading may already claim to take rank as one of the important Romano-British collections in England.

## NOTE ON THE ANIMAL REMAINS FOUND IN 1892.

*By* Herbert Jones, F.S.A., F.L.S.

The excavations of 1892 were not so prolific in animal remains as those of 1891: probably on account of their having been carried out on ground not so thickly covered by houses as *Insulæ* II. and III.; and though many pits were dug

out, their yield in bones was not great. The skulls and bones of dogs especially were far fewer than those recovered from a similar area in former years.

The stags' antlers on the other hand were both larger and more numerous than in 1891; by far the greater number, as well as all the largest, being found in the space immediately east of the *forum*; and not in pits, but on the Roman surface.

To the list of mammals given in the last paper,[a] only one addition can be made this year. The presence of the goat, then considered as highly probable, is now clearly proved by the discovery of the frontal bones of two crania with horn-cores, and of footprints on a tile identified as those of a kid or very small goat, being slightly more pointed than any assigned to sheep.

Some fragments of a human skull were found near the south-east angle of the *forum* area, on the upper surface of the gravel, but without any other bones. Parts of two or three skulls, likewise broken into fragments, seem to have been discovered in the *forum* by Mr. Joyce, and are now in the Museum at Silchester. A femur, large but very imperfect, with the distal extremity wanting, found in the ditch outside the walls near the water-gate, and some fragments, probably part of the skeleton of a newly-born child, from a pit north of the *forum*, were the only other human remains met with.

From the drain of the baths near the water-gate a very fine and, with the exception of the jaws, almost complete skull of a young *bos longifrons* was dug up. It appears to be the cranium of an animal just adult, and was probably slaughtered for food.

The frontal bones with horn-cores of *bos* were far fewer than in 1891; but metacarpals and metatarsals were as usual very numerous. Their average length is about 192 and 210 mm. respectively. Detailed measurements of these and the other bones found are being taken, and will, it is hoped, be published with next year's report.

Many bones of the sheep were found, but, as is almost invariably the case, all but the metacarpals, metatarsals, and mandibles were very imperfect. The approximate average length of the metacarpals and metatarsals is 124 and 128 mm. respectively.

The goat has already been mentioned. With the exception of parts of two skulls no bones have been absolutely determined, but it is extremely difficult to distinguish them from those of the sheep.

Bones of the horse were more numerous and better preserved than in 1891,

[a] *Ante*, p. 286.

but those of the skull very imperfect. They are all small, one metacarpal of an apparently adult animal remarkably so; but too few have yet come to hand to give a trustworthy average.

No actual remains of the cat were found in 1892, but this is not surprising considering the paucity of houses within the area excavated. Traces of this animal nevertheless were again present in the form of two footprints upon a tile which are almost certainly those of a cat.

Of the dog there is nothing to remark this year.

The bones of the stag are very few; and nearly all the antlers had as usual been shed, and were more or less prepared for manufacture.

There are no new varieties of birds to report this year. The raven and crow, especially the former, seem to have been very plentiful, and gave the largest number of identifiable bones. Very few spurs of cocks were found in the *Insulæ* excavated.

By far the most interesting discovery of the year, having any bearing upon natural history, was that of the great bed of oyster shells east of the main entrance to the *forum*. This bed was composed of nothing but oyster shells, no others could be found therein; but, as is invariably the case when any considerable number are found together at Silchester, they were those of all varieties and qualities of oyster. The shells, evidently intentionally spread out in an horizontal layer levelled on the top, extended not only under the wide street running east and west but on both sides of it, and it is impossible to form any reliable estimate of their number or weight when deposited.

The remains of a few mussel shells were found in 1892 and traces in 1891. Considering the very fragile nature of these shells it is surprising that any fragments of them should have lasted, and the few remaining probably indicate that the use of this mollusc as food was general at Silchester.

No snails' shells were found, nor any bones or scales of fish.

# APPENDIX.

## *Carved Scottish Casket, belonging to the Earl of Verulam.*

January 21st, 1892.—The Earl of Verulam exhibited a carved wooden casket of Scottish workmanship, on which A. W. Franks, Esq., V.P., made the following remarks:

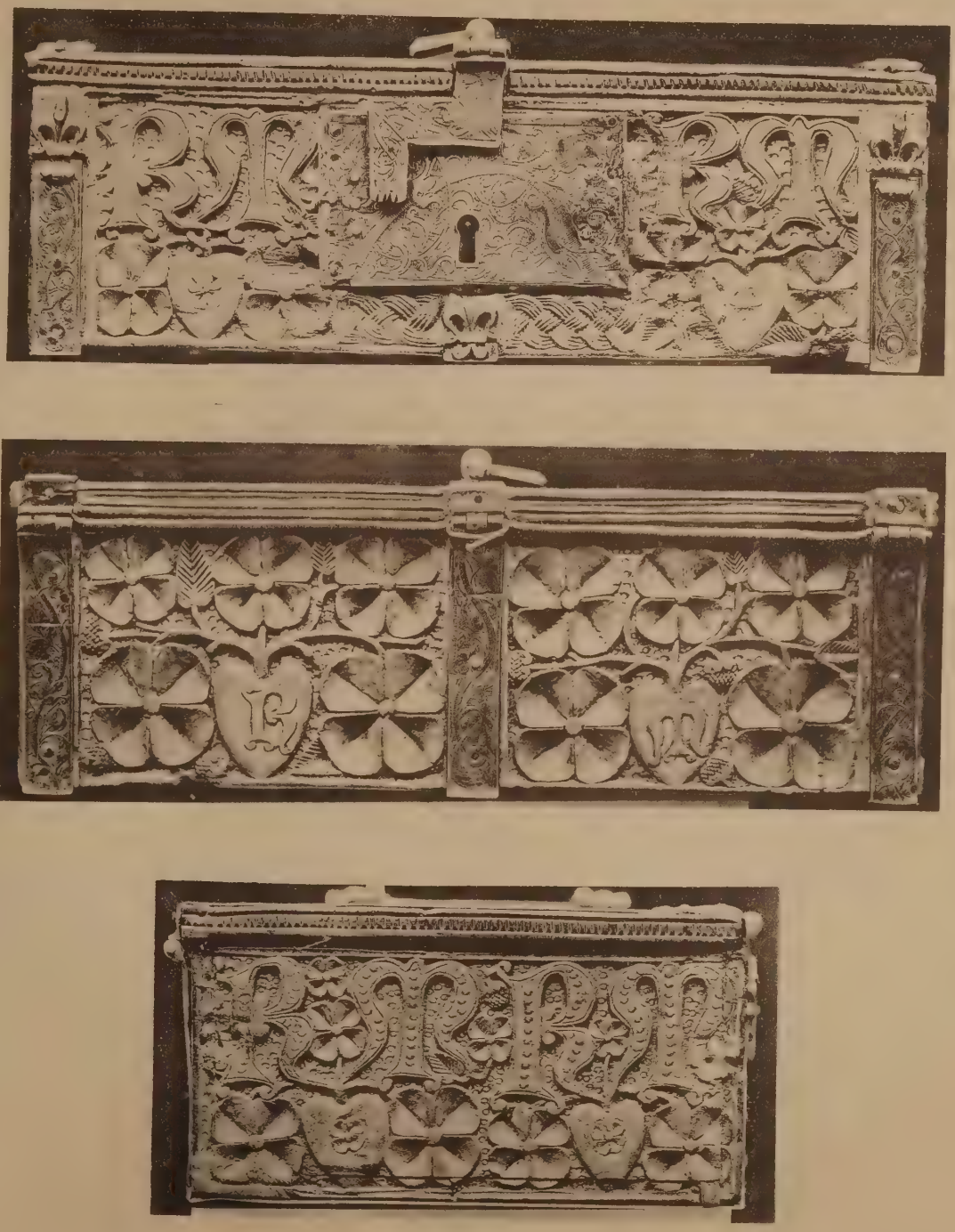
"The casket exhibited by the Earl of Verulam, at my special request, is an object of considerable interest. An engraving of it was made some years since, though I have not been able to ascertain where it was published. The representation, at any rate as far as the mounts are concerned, is indifferent. The following inscription appears on the plate: 'This Box, of carved oak, bound around with Silver Bands and a lock of the same, was the property of Mary Queen of Scotland, and came into the possession of Adam Lord Forrester her Chancellor. It passed through the hands of that Family until it ended with Harriet Forrester, married to Edward Walter, Esq$^{r}$. and by her request it devolved to her Granddaughter Charlotte Grinston. The marguerite which forms the principal ornament of this Box was the Badge adopted by Margaret Queen of Scotland, eldest daughter of Henry VII., and was frequently borne by her Granddaughter, Mary Queen of Scotland, but there are few (if any) other examples of the Badge having been placed on a Heart as it is here. The allusion is certainly not evident, nor has it yet been accounted for by the Heralds or Antiquarians of this Country.'

This statement contains a number of errors. The casket is not of oak, but of some wood with a fine grain, probably pear, much better suited to the purpose. There was no Adam Lord Forrester, the title having been bestowed in 1633 on George Forrester. There was no Forrester Chancellor to Queen Mary, nor any direct progenitor of the name of Adam excepting Sir Adam Forrester, the founder of the family, who died in 1405, and who was keeper of the Privy Seal, but at a much earlier period. With regard to the *marguerite* I think I shall be able to show that it must be another flower, and I do not know on what evidence Mary Queen of Scots is stated to have used the marguerite as a badge.

The casket is a very good specimen of carving, apparently of the commencement of the 16th century. On the lid (Plate XLII.) is an interlacing pattern, of what would in former days been called Runic Knots, enclosing the initials R. and M., with the open crowns or coronets that usually surmount the initials of persons, however humble, in medieval times. They seem to read more often R. M., but sometimes M. R., and they are probably the initials of the Christian names of the persons for whom the casket was made. Neither Margaret Tudor nor her granddaughter Mary Stuart would have used R. M. as their initials. On the front (Plate XLIII.) are the initials R. M., and hearts on which are four-petalled flowers. The same decoration appears on the ends, which are alike, and on the back are two hearts enclosing the usual initials, and from them spring five of the four-petalled flowers. (Plate XLII.) The bottom is divided into two panels, one with interlaced strap work of a very Scottish design, the other with a quaint device. (Plate XLIII.)

SCOTTISH CASKET BELONGING TO THE EARL OF VERULAM.

*Top and Bottom Views.* (⅔ *linear*).



SCOTTISH CASKET BELONGING TO THE EARL OF VERULAM.

*Front, Back and End Views.* (¾ *linear*).

On examining the carvings carefully we shall see that the four-petalled flowers are in many cases accompanied with leaves and fruit, which seem to prove that they are strawberries, and certainly not marguerites. An additional petal would have been better for a strawberry, but many more would have been required for a marguerite.

The strawberry plant, or *fraizier*, was the well-known punning device of the Frazer family, to whom it is likely that R. or M. belonged.

The silver mounts of the caskets consist of bands very nicely engraved, and with occasional *fleur-de-lis* in relief. I doubt, however, whether they are the original mounts of the casket. The lock does not quite fit the space intended for it, and the execution seems later than the carving. They belong to the middle or second half of the 16th century. In the centre of the three bands on the lid are the initials M. R. very well engraved, and these might well have been intended for Queen Mary, into whose possession the casket may have passed, with many other curiosities, though not originally intended for her. It ought to be mentioned that in some of the crevices are fragments of red wax, showing that the casket has at some time been sealed up, on account of its contents.

The reason that I was anxious that this casket should be sent to London for inspection is that there is a duplicate casket of the same kind which formed part of the famous Meyrick collection, and was presented to the British Museum by General Meyrick in 1878.

I feared that our example might be a modern copy, but I feel satisfied that this is not the case, and that both are the work of the same period, made probably by the same artist and for the same persons. Though the designs are similar they are by no means the same. The design of the knotwork on the lid is of a very different pattern, and in all instances the initials are R. M. and not M. R.; on the lid hearts with the usual flowers are introduced between the panels.

The mounts are, however, modern, and probably added by Sir S. R. Meyrick, but without any exactness in copying the details, so that the engraved initials are omitted."

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## *Silver-gilt Chalice and Paten found at Dolgelly.*

March 24th, 1892.—W. Boore, Esq., exhibited a silver-gilt Chalice and Paten, of early thirteenth century date, said to have been discovered about two years ago, concealed beneath a rock by the roadside, near Dolgelly, in North Wales. Another story is that the vessels were found built up in an old wall.

The Chalice and Paten were thus described by W. H. St. John Hope, Esq., M.A., Assistant Secretary:

"The chalice is 7¼ inches high,[a] and of unusually massive proportions. (Plate XLIV.) The bowl is 6¼ inches in diameter and 2 inches deep, and has the slightly curved lip common to all early chalices. The knot, which is wrought in one piece with the stem, is circular, 3 inches in diameter, and somewhat flattened. It is divided into twelve distinct lobes, alternately beaded and plain; the plain lobes are also beaded on each side of their bases, and have alternately a rounded and a polygonal section. Above and below the knot is a short piece forming the stem, engraved with vertical stiff-stalked leaves. The broad-spreading foot is circular, 6⅜ inches in diameter, and has twelve lobes with pointed trefoiled ends, radiating downwards from the knot. Below these appears a second and somewhat larger series of trefoiled lobes, beautifully engraved with characteristic early-English foliage on a hatched ground. Between the points, which extend to the edge of the base, the spread of the foot is similarly engraved with leafwork. The lowest member of the foot is a plain vertical band, resting on a bold roll molding. Inside the foot, which is gilt as well as the outside, is engraved in small capital letters:

NICOL'VS · Mꝺ | FꝺCIT Dꝺ ꝶꝺR | FORDIꝺ (*sic*)

Who Nicholas of Hereford was has not yet been ascertained, but his handiwork shows he was a first-rate goldsmith.

The chalice resembles in form much smaller examples found in coffins of bishops at Salisbury and York and Chichester, all of the thirteenth century.

The paten, like the chalice, is of massive make, and the largest English example that has yet come to light, being 7 5/16 inches in diameter. (Plate XLV.) It has two depressions, the first plain and circular, the second sexfoil, with engraved spandrels. In the centre is engraved, within an inscribed band, 2 5/16 inches in diameter, a figure of Our Lord, sitting on a seat, with His right hand raised in blessing, while with His left He holds a closed book, which rests upon the left knee. The nimbus is represented by a ring of small circles. The surrounding inscription is:

+ IN NOMINꝺ: PATRIS: ꝺT FILII: ꝺT SPIRITVS SANCTI AM

The spandrels on either side the central device are engraved with leafwork, but the other four contain the evangelistic symbols, St. Matthew and St. John in the upper two, and St. Mark and St. Luke in the lower, thus forming, with the central device, a Majesty. The engraving of the paten is apparently not by the same hand as that on the chalice. There is, however, no reason to doubt that the paten was made for the chalice.

The date of the vessels is *circa* 1230, and they are unquestionably the finest English chalice and paten that have yet come to light. They were sold at Christie's on March 4th, 1892, for £710."

[a] Only two taller English medieval chalices are known: those at Leominster and Trinity College, Oxford.

SILVER-GILT CHALICE FOUND AT DOLGELLY.

*(full size).*

SILVER-GILT PATEN FOUND AT DOLGELLY.

*(full size).*

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[*The names of places in the "Archaeological Surveys" are not included, being under the letters of the alphabet in those surveys.*]


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